The gaze of practical intent: An ethnographic exploration of socio-communicative distortions within hobbyists' informal learning spaces.

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M.Phil., BSc (Hons)

This thesis is submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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Abstract

Background: The idea of non-institutionalised learning is an appealing one, particularly when understood within a context of educational freedoms produced through acts of self-realisation and participatory engagement. Thus, hobbyists, are a type of informal learner who enjoy voluntary learning across a wide range of social spaces in communication with peers and career professionals. Likewise, communication, explained as the transference of messages, can also be understood as the basis for which all representations of social life - including learning - are given meaning. Whilst hobby-focused literature exists, the interplay between communicative acts and hobbyists' learning is less understood. Therefore, the findings aim to review the extent to which informal learning might be positioned as emancipatory, considering it has no formal policy governance beyond the settings in which it unfolds.

Methodology: This thesis comprises a multi-sited ethnographic study, that through the lens of critical theory, will explore the extent that hobbyists understand the presence and effect of communicative distortions. Observations produced over an 11-month engagement with aquatic enthusiasts, along with in-depth semi-structured interviews, are used to examine the characteristics and effects of the settings in which hobbyists are held to learn.

Findings: Participants described the link between the online and offline space through their understanding of the ways in which various permutations of space influenced their learning. Participants also demonstrated awareness of the presence and effects of distortive communicative acts, with disruptions found online perceived to be significant and far-reaching compared to offline spaces. *Beliefs*, *identity*, and *individual differences* also served to produce communicative distortions. Furthermore, hobbyists explained their approaches for overcoming these effects and whilst both the origin and nature of distortions can explain

persistent issues within both the aquatic hobby and informal learning, such strategies might also form a starting point for bridging troublesome communicative divides.

Contents

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Chapter 1 – Introduction

1.1. Chapter overview

The overall aim of this study is to contribute to a better understanding of the extent and effect of distortions to communication processes within the informal learning spaces of hobbyists. Therefore, this chapter will outline an ethnographic study based around problematising *communicative modes* and *acts* within the educational practices of hobbyists, characterised by aquatic[1] enthusiasts. This study will examine the nature of hobbyists' learning as framed within a vast social landscape where resources are arguably organised to exist beyond frontiers of singular communicative effects such as a printed book, a conversation or an online resource. Therefore, the formation, transmittance and consumption of messages, along with their role in the production of meaning will be under scrutiny. Furthermore, *all* who learn, regardless of the context, do so under presupposed language choices that describe and link learning *actions* within *space* and *time.* These conceptions - whilst holding a degree of descriptive use - result in learning behaviours and resources also being attributed to distinct constructs, such as the *online* or *offline* space (Eklund, 2015). Consequently, considering the near-ubiquitous presence of online affordances in everyday life, along with the creation of ever-shifting and unbounded forms of informal learning spaces, this study will examine the perceived link between such spaces, including the extent that informal learning enacts as an emancipatory force across all contexts and settings.

In applying appropriate social theory to this project, I will interrogate the data through application of Critical Theory to frame a multi-method, ethnographic study which will explore the ways in which aquatic hobbyists negotiate their learning whilst assuming an ever-changeable communicative status as members of an aquatic community group that holds a dedicated presence in the online and offline space. Furthermore, there will be additional emphasis on participants' nominated choice of an object or concept they feel important to their learning. Overall, Chapter 1 will maintain an emphasis on the appropriate introductory contextual and theoretical ideas, in preparation for the concluding

[1] *Aquatic* refers to any plant or animal that lives in water.

sections that justify exposition of the research questions, along with thoughts on the overall contributory aims of the thesis.

1.2. Background: Situation and learning

In relation to situation and environment, learning has traditionally been structured and conceptualised relative to *where* it occurs. Formal learning is defined as that which is planned and takes place in a dedicated educational establishment, usually involving the end goal of obtaining a recognised qualification (Rogers 2014, p.15). Non-formal learning is classed as planned, but away from an educational establishment (such as driving lessons or cake decorating in a bakery setting). Informal learning on the other hand might be described as unplanned, not bound by learning objectives and occurring in a non-stable, changeable environment (Rogers 2014, p.15). Thus, any hobbyist might represent a type of informal learner, particularly one who learns in a self-directed and voluntary way.

1.2.1. Hobbyists

The *hobbyist* is defined by one who voluntarily undertakes regular, pleasurable activities in the absence of mandatory social obligations (Azevedo, 2013). Furthermore, this leisure time is largely made available and shaped through various cultural affordances (Stebbin, 1980; Kelly, 1983 as cited in Adler & Adler, 1999). Additionally, hobbyists are described as demonstrating a desire to improve their knowledge, attitudes and skills (Newman, Wiggins, Crall & Graham, 2012), with such activities positioned as important for personal development, whilst counteracting the more obligatory aspects of life. Through their voluntary activities, hobbyists also share a link with cultural perceptions associated with the preservation of a civil culture (Flyvbjerg, 1998) and the subsequent reproduction of strong democratic societies (Havel, 1993 as cited in Flyvbjerg, 1998). That said, to reflect a primary focus within *education*, there is some initial urgency to declare the link between hobbyists and the socio-educational domain. Therefore, this affiliation is foregrounded through understanding that learning does not belong solely to the academy, it is an asset formed through on-going human processes, produced by continuous exposure to vast endogenous (individual) and environmental (social) stimuli (Brown, Collins, & Duguid, 1989). Therefore, there are elements of formality and informality present in some degree within all learning activities (Colley, Hodkinson & Malcolm, 2003). In addition, the value of learning through

doing (Dewey, 2007, p. 35) also corresponds with the practical aspects of hobby pursuits, with the various practices and spaces implicated in social learning also contributing to the production of normative, reproducible values (Duggan, 2019). Furthermore, the self-determined role of the hobbyist, including upholding motivation and participatory engagement with like-minded others inevitably aligns with the principles of *heutagogy*, (Hase & Kenyon, 2000) where knowledge is *shared* by individuals as opposed to *storing* it purely to satisfy a non-participatory goal, such as an examination (Cochrane & Narayan, 2013). Although somewhat underrepresented in terms of learning in comparison to formal educational pursuits, hobbyists do exist within the informal educational literature. Thus, they can primarily be found through work focusing on *situated learning* within *communities of practice* (see Lave & Wenger, 1991) and also through the amateur-professional knowledge exchange role of the *citizen scientist* (see Dias da Silva, Heaton & Millerand, 2017). Being informal in nature, hobbyists' learning strategies can be considered to be 'hard fun' (Papert, 1980, as cited in Chi-Chang & Falk, 2014) and learning under these circumstances is documented as being much the same as formal approaches, that is, hobbyists aim to reorganise encountered information to offer representations of new understandings to offer semantic empowerment through experience, reflection and discovery (Collins, Seely Brown & Holum, 1991; Bell, Lewenstein, Shouse & Feder, 2009; Falk & Needham, 2013). Likewise, the theory of *threshold concepts* can also apply, where the hobbyist recognises a gap in their knowledge to traverse the *liminal* space from perplexity into enlightenment (Meyer & Land 2003). Additionally, the voluntary status of *hobbyist*, means that it cannot exist under any form of duress and therefore, a hobbyist in the purest sense enacts away from the interferences of many social obligations such as employment or caregiving (Azevedo, 2013; Chi-Chang & Falk, 2014). Furthermore, the voluntary nature of the hobbyist, also implies the presence of influential factors that trigger a motivational urge at points - *before*, *during* and *after* hobby activities - that play a role in the hobby being either short lived or sustained over a number of years (Chi-Chang & Falk, 2014). Regardless of the longevity, that the hobbyist engaged with a topic or activity at all, implies that a degree of influence was produced that links in some way to *motivation*, that then impacts enthusiasm and continuation of the hobbyist status. Consequently, the role of the hobbyist shares a direct affiliation with a degree of individual freedom and motivation, with disruption to either holding consequences for the *hobbyist* role itself.

The individual as hobbyist can be positioned to be driven by various distinct or combined manifestations of *intrinsic* and *extrinsic* motivating factors (Kuvaas, Buch, Weibel, Dysvik & Nerstad, 2017). Thus, a hobbyist who is intrinsically motivated would be capable of validating the worth of an achievement as influenced within the pleasure and satisfaction of the activity itself (Deci, Connell & Ryan, 1989). In straightforward terms: experiencing enjoyment for enjoyment's sake. A hobbyist who is extrinsically motivated on the other hand, assumes and validates their achievements alongside the influential presence of a third party. Therefore, this type of hobbyist might be more attuned to the influential effects of others. Likewise, the extrinsically motivated hobbyist might maintain a vigilance toward seeking positive interactions or attempt to avoid experiencing the kind of negative feelings produced through reprimands, punishment or shame (Deci & Ryan, 2000). Therefore, hobbyists learning in a participatory sense, might adopt various manifestations of both intrinsic and extrinsic motivational factors.

1.2.2. Aquatic hobbyists

Aquatic hobbyists have demonstrated their collective enthusiasm over many decades, with King (2019), positioning the ornamental aquatic industry to involve more than 2 million people worldwide, including exporters, importers and conservators of aquatic animals and plants, along with commercial outlets and hobbyists. The affordances of the internet allow all these aquatic enthusiasts to communicate across physical, geographical, cultural and chronological divides, with more local, community-type collaborations also afforded in the physical space through various types of national and regional aquatic clubs and societies.

1.2.3. The online/offline aquatic hobby learning space

This enquiry is also in response to current literature posing the problem that whilst informal learning approaches hold attractive qualities for formal educational policy makers and career professionals – with each adopting and interacting with various aspects of the amateur sphere – these informal domains are also problematic as a result of their vast availability of both space and resource (Edwards, 2009). Additionally, existing accounts in the literature of the ways in which hobbyists learn are accused of being over-simplified and lack specific detail on the nuanced nature of informal learning as a social practice (Azevedo,

2013). In general terms and in relation to the *situation* of learning, there is also a persistent trend to treat both the *online* and the *offline* space as though they are disconnected, with online worlds generally perceived to have a degree of separation to what is considered the physical or *real-life* (Eklund, 2015). Furthermore, an aquatic journalist recently explains:

> "If I was joining the hobby for the first time, I think I'd be overwhelmed. I'm relying not just on my own research abilities, nor on the knowledge of my retailer, but also on the retailer's ability to convey information in a way I can understand. I'm up against heaps upon heaps of conflicting, confusing and often outright contradictory information found online." (Practical Fishkeeping News, 2019)

The above quote further supports the perception of these distinct learning spaces, suggesting that the information found and communicated *within* online spaces is (i) different to that of the offline space and therefore (ii) online information and resources hold distinct characteristics. Additional complexities arise through consideration that aquatic enthusiasts' aquaria[2] and their associated practices unequivocally require the *offline* space in order to exist. Therefore, although representations of the facsimiles of aquaria – such as photographs, motion picture or descriptions – can exist in online spaces, elements of the aquatic hobby cannot *materially* exist or function in online spaces. Likewise, certain aspects of aquatic online worlds *can* exist outside of the online space, for instance a conversation about an online forum post, or a printout of a discussion thread, however the online forum *itself* cannot. Therefore, there are distinctions between these spaces that relate to matters of existence, form, function and the self; with the aquatic hobbyist arguably enacting a constant mediation between both online and offline spaces in ways that are now commonplace and taken for granted. Moreover, as the above quote highlights, it is the online space that assumes majority blame in terms of producing confusing information; with activity occurring in the offline space portrayed as a seemingly authentic benchmark of *understanding.* Additionally, beyond traditionally derived phrases such as *blended learning*, the existence and use of distinct online *or* offline terms highlights a general disconnect between the apparent seamless deployment of both spaces and the precise conceptions

[2] *Aquaria* refers to the plural of *aquarium*, which in turn is another name for a fish tank.

needed to frame the component parts of their use. Thus, in terms of the communication of information, the arbitrarily permutated worlds of *online* and *offline* learning spaces - and the manifestly complex issue of the individuals and resources they hold within - pose challenges for educational researchers in terms of how best to understand the implications of upholding conceptual distinctions of the online *or* offline space. Subsequently, to reflect the necessary use of these terms within this thesis, *online* will generally be defined as referring to any entity, environment or behaviour that requires direct involvement with internet-based connectivity in order to fundamentally exist. Likewise, *physical* or *offline* will symbolise any space, behaviour or resource where internet-based connectivity is not necessarily a required condition for the activity to occur.

1.2.4. *Intra* and *inter*-hobby roles

As outlined above therefore, the macro-landscape of informal learning spaces, is complete with vast representations of learning resources that require the aquatic hobbyist to engage with information communicated through complex combinations of physical spaces, digital environments, technological affordances, texts, objects, animals, artefacts and other individuals. Furthermore, whilst negotiating these entities, aquatic hobbyists must also simultaneously safeguard the features of these environments in order to uphold them as useful spaces for future learning (Preece, 2004). Consequently, regardless of the type of collective learning space, these protective obligations tend to naturally introduce forms of hierarchy and governance as demonstrated through the various manifestations of governance-type roles such as the *committee member*, *administrator* or *moderator* who hold responsibility for enforcing the associated terms and conditions of participation (Davies, 2005). Therefore, in addition to maintaining motivational drive, aquatic hobbyists might also be sufficiently engaged to adopt dual hobbying roles that mean they are both a *hobbyist* and *regulator* within a learning space. Subsequently, the hobbyist might be influenced by the perceived positive or advantageous effects of these roles and therefore driven by various degrees of altruistic or egocentric motives. Furthermore, the authority endorsed through these roles may hold varying degrees of perceived benefits that are dependent upon a particular environment. For instance, a moderator in an online aquatic hobbyist group may hold no influential sway in the offline setting of the monthly meeting nights.

1.3. Interpretation, meaning and beliefs: Communicative currency of learning

Shifting the focus to *communication,* this arguably ubiquitous word finds itself applied with a 'common impulse' to various educational contexts and phenomena (Spector, Merrill, Merriënboer & Driscoll, 2008 p.xiii). Thus, for the purposes of this project, communication will be simply defined as the 'transfer of messages from one party to another' (Abercrombie, Hill & Turner, 2006, p.69). In addition, throughout all areas of social life - and more overtly apparent when learning - is the requirement to find *meaning*. Thus, humans constantly rely upon cognition in order for sequential enactments of their day-to-day life to produce sense and hold meaningful order (Lee & Seel, 2012). Therefore, in general communities, even individuals who choose to live socially remote lives, cannot act in complete communicative isolation from the influences of others, considering they also need to make sense of their immediate *being* through communicating the nature of their on-going sensory perceptions to that of their existing assumptions. Therefore, when entering into an act of communication, that the individual desires to *not* find meaning is irreconcilable with entering into the act at all. Thus, for hobbyists, communication is a social practice that requires the dual role of both *consumer* and *conveyer* of interpreted meaning through formation, consumption and distribution of constructed messages.

1.3.1. The complexities of communicated beliefs

The inherently distributive nature of communication itself, including the individual, social, technological and digital effects of contemporary life, arguably produce vast, easily accessible repositories of information through which individuals might use to form ideas and beliefs (Lovink, 2014, p.147). Thus, human beings arguably have to get their knowledge, ideas and beliefs from *somewhere* and considering that influential aspects of social life might not always be apparent or consistently meaningful across all social worlds, precisely *what* constitutes knowledge, ideas and beliefs has remained a point of relative ontological and epistemological contention throughout the history of philosophical and social sciences (Nagel, 2014, p. 46). Furthermore, as early as the 1960s, social and educational discourses emerged alongside progressive technological innovations, which in turn produced a critical response levelled at the role of seemingly inescapable social systems in producing irreversible and undesirable social change (see Debord, 1967). Some 60 years later, the consumptive and passive nature of the technological affordances of the

post-war era, made way for contemporary individuals to have a more direct, communicatory role as a 'distributed actor' *within* these vast social structures now commonplace across many domains of social life (Lovink, 2014 p.147). Consequently, as technological advances persist, so too have condemnatory discourses, including the accusation that to enact *as* and *with* other *distributed actors* in modern spaces through advancements to communicative modes, has resulted in the rise of the 'problem discourse'; ultimately, this means less quality information is available, not more (Weizenbaum & Wendt, 2006 as cited in Lovink, 2014 p.149).

In addition to social and technological disruptions to communication, humans are also ultimately free to purposefully misrepresent any number of their beliefs through communicative acts - *regardless* of their allegiance with it (Derkson, 2012). Furthermore, this disingenuous behaviour can occur alongside a correspondingly dishonest justification, or the situation may be such that no justification for a falsehood is ever needed. An individual may also inadvertently accept or misrepresent information to be *a* truth, as opposed to *their* truth and whilst not being deliberate or engineered for obvious gain, nonetheless this represents distorted communication. Thus, theoretically, the reasoning behind purposeful or inadvertent communicative distortions would fail to hold a sufficiently self-reflective or rational basis under peer scrutiny. Additionally, there is also the related effect that constant exposure to information within iterations of cultural worlds produces *taken for granted* assumptions, that whilst offering a shared basis for understanding the world, also further reinforce boundaries of social convention (Geertz, 1973; Durkheim, 1950; Parsons and Shils, 1951). Consequently, the formation of knowledge, mediated by information, that in turn becomes a justified belief, may have little *justification* held within it. Similarly, determining *when* a distortion might have occurred could also be problematic, as might locating the extent of any ensuing strategic motives or unfair gains. Therefore, just as hobbyists are vulnerable to various self-produced motivational influences, other social influences might also contribute to the formation of justified beliefs that, through their banality or concealment, play more of an *implicit* role in the production of cultural norms and a state of *unfreedom*.

It seems inevitable, therefore, that considering the diverse nature of the different interests within the aquatic scene that opposing beliefs within the hobby might arise, including factors that influence the ability to find agreement. Additionally, these value contests can exist without any apparent promise of unification except the agreement to disagree, which produces a corresponding likelihood for irresolvable communicative tensions to arise *within* groups that hold different but equally defensible views (Trowler, 2012a). Furthermore, within online spaces, the contribution of firmly held knowledges and beliefs produces concepts such as 'ideologically homogenous echo chambers' to represent collectives who hold analogous beliefs impervious to reduction or critique (Wollebæk, Karlsen, Steen-Johnsen & Enjolras, 2019).

1.4. Power and communication: Theoretical socio-educational underpinnings

In relation to the problem of communicating coherent meanings across cultural and contextual divides, it is at this point that I can offer a brief introduction to firstly, Jürgen Habermas' *theory of communicative action* (Habermas, 1984; 1987) and secondly, Michel Foucault's idea of *governmentality,* the *gaze* (Foucault, 1991, p.201) and *the care of the self* (Foucault, 2020). Not traditionally considered scholars with seamlessly harmonious views, both Habermas and Foucault shared common ground through an interest in the conditions required for the production of knowledge and power within the various communicative discourses of the social world. Additionally, much like many of the critical theorists, Habermas and Foucault did not directly focus their efforts specifically within the educational arena, however, considering the notion that learning spans across vast social domains, both theorists' ideas hold corresponding relevance (Blake, 1995; Gouthro, 2002; Ball, 2013, p. 34-35; McNichol Jardine, 2005). Thus, the initial introduction to Habermas' theory of communicative action starts with his idea of *cognitive interests,* (Habermas, 1968, as cited in Roderick, 1986 p.51) through which he positions the human to possess 3 inherent characteristics. Firstly, the *instrumental* endeavour concerned with securing resources for survival, secondly, the *communicative* endeavour, and the third, *emancipatory* endeavour, related to the human drive to understand the extent of their own freedom. Whilst Habermas considered all three interests as important in their own right, he was interested in the effects of their interplay within the modern landscape. In particular, the social

conditions that might unfold to permit one or more interests to influence the acuity of another (Roderick, 1986, p.57).

In addition to his cognitive interests, Habermas formed his communicative theory from the position that communication itself held a fundamental and predetermined dimension based upon (i) the presence of a shared language and (ii) that the precise nature of this alliance further implies that shared understandings and meanings must also exist beyond individual consciousness in order to permit transactional acts of communication. Consequently, his theories attempt to account for the various *ways* in which citizens were encouraged or prevented to understand the extent of their freedom through distortions to these communicative acts – that, through their reciprocal nature, hold *universality* through language. Therefore, these disruptions form the central theme of Habermas' *rational communication,* with *rational* being related not to insular, overly zealous or stiflingly literal interpretations of meaning, but rather a *rationality* associated with the concepts of *knowing*, *truth*, *freedom* and *justice* relative to the context of their cultural derivation and application (Roderick, 1986 p. 11). Furthermore, that an individual might hold any rationalised belief was, for Habermas, a somewhat likely and credible occurrence; that such views should be routinely forced on others, without first undergoing fair and equal debate, would, however, be rejected. Thus, in support of the complexities outlined in section 1.3.1., the formation of a particular *justified belief* and the conditions expected for both its semantic and moral contextual relevance, might not necessarily be a straightforward or harmonious estimation.

Habermas emphasised that once a social concern was identified by the subjugated individual, *all* those – including those in power - would therefore be made visible. Subsequently, once visible, they would all *belong* to that specific social concern, united through either perceived social or individual rewards or insufficiencies. Therefore, in order for (i) the oppressors to understand their authoritarian effect and (ii) the oppressed to be able to free themselves so that (iii) the social struggle is alleviated, *all* invested participants require equal access to a metaphorical arena that permits equal discussion of the issues at hand. Fundamentally, that the oppressors also need to understand the extent of their attributed influences, also introduces an *ethical* component, which in turn, relies heavily on

the scope of their own *morality* to desire to establish fair conditions. Thus, the characteristics of the concept known as Habermas' *ideal conditions for speech,* has in part been described (Blake, 1995).

The key points relative to the story so far here are that all participants, once aware of a social struggle *could* resolve conflict through debate based upon an enlightened process that ultimately produces a form of conciliatory, unified agreement through one party's acceptance of the 'better argument' (Flyvbjerg, 1998). In stating these conditions, however, Habermas set the scene for introducing how this consensus-seeking process was vulnerable to failure. Thus, those who deliberately failed to represent their truth through purposeful manipulation to the range or context of their conveyed information – such as edits, omissions or tactics that limit the ability for others to communicate within the conditions of symmetry outlined above, means that, in Habermasian terms, *communicative action* has become distorted through the presence of *strategic actions*. Subsequently, in addition to the various influential, yet commonplace communicative entities outlined in section 1.3.1., Habermas also positioned inescapable actions of the *state* and matters of *economics* as instrumental to the formation of knowledge, ideas and beliefs. Therefore, Habermas suggested the effects of these entities – known as *steering media* - could also account for the production and distribution of both purposeful and inadvertent distortions to communication. Furthermore, he also accused them of desensitising the human against recognising when to critically evaluate, or *thematize* unfamiliar information to offer it a place in their worldview, or *lifeworld,* to then authentically bridge the gap between non-meaning and meaning (Habermas, 1987). Ultimately, all communicative distortions have the ability to obscure original and genuine intentions, potentially resulting in individuals failing to recognise oppressive entities and manipulated information. In turn, the formation of an appropriate critical response is also denied, which further bolsters the reproduction of particular ways of thinking and being to the extent they become accepted as normal.

The relevant aspects of Foucault's ideas initially relate to the construct of and influences on the private and social self. Subsequently, I will position Foucault's idea of *governmentality,* the *gaze* and *the care of the self* as helpful in addressing one of the deficits identified in Habermasian theory. The shortfall, however, is not related to weaknesses within all that it

is that communicative action aims to *do*, rather it relates to the extent that all participants implicit within a particular social concern understand the presence and effect of unfair social conditions, including those that impact upon their own lives. Thus, it follows that if the strategic oppressor fails to acknowledge the seriousness of their tactics, or misrepresents a belief for personal gain, in Habermasian terms they will also have failed to reproduce freedom and justice through their inability to recognise or declare the *truth* of their strategy. In terms of *consensus*, the theory of communicative action can now offer little more than an agreement to disagree, which is arguably a weak form of compromise considering that this end result neither removes conflict, nor the state of oppression. In re-positioning the critical lens to magnify the reasons why such misrepresentations might occur, the essence of Foucault's concept of *governmentality* and the production of *normalising judgements* (Foucault, 1991, p.201) through the conscious or internalised awareness of the *gaze* (Foucault, 1991, p.184) offers additional depth. Thus, the existence of acceptable behaviours can be seen as driven through pre-established and delineated social values. Subsequently the defining boundaries of such norms hold and control all the implied characteristics and representations of that norm, which then influence human behaviour to enact within it. The *gaze,* therefore, describes the effect produced by other agents and structures that uphold and reproduce the values that are characterised by a particular social norm. Additionally, the *gaze* also acts as a spotlight to locate social instances that require a judgement to be made, with such instances being made *visible* by a suspicion that particular phenomenon might lie outside the limits of *normal*. Foucault believed that in many social instances, the effect of *governmentality* existed as subtle to the point of being undetectable, meaning citizens might not always know *how* they were being influenced, nor the extent of their own role in perpetuating forms of social power.

Foucault, therefore, was concerned with those influential forces that created conditions that conspired to dupe the individual into ever realising that they were oppressed at all. Consequently, the very nature of dominant knowledge and beliefs means that overtime they endure to become embedded as *normal* to subsequently withstand deposition or challenge, with their intention being 'completely invested in its real and effective practices' (Foucault, 1980, p.97). Therefore, such prevailing assumptions are capable of a continued reproduction to the extent they transform into a taken for granted assumption to become

an expected cultural characteristic. As a result, Foucault would stress that to be rational through *reason,* in the Habermasian sense, is a futile endeavour. This is based upon the belief that - despite the individual entering into a process that observes the ideal conditions for speech – it is the knowledge that is used to form *reason* itself that is already distorted. Thus, Foucault positions power relations as being an innate characteristic of social discourse and therefore, impervious to exclusion through debate. Furthermore, through his later idea of *the care of the self,* (Foucault, 2020, p.43) Foucault refers to the ways that the individual might determine the origin and effects of their own ethical conduct to understand the presence of social forces and the extent of their own lived moral emancipation (Foucault, 2020, p.45). Foucault, therefore, was interested in those situations whereby any individual – *including* the oppressed *and* the oppressors – fail to recognise, fail to be convinced of, or express behaviours that, under scrutiny, offer some insight into the extent of their provenance within a normalised social convention.

Ultimately, the application of these theoretical elements aims to foreground the juxtaposition of *what could be*, and *what is* enacted within informal learning spaces to prompt discussion around attempting to close some theoretical and practical gaps. Therefore, Habermas and Foucault's theories aim to offer educators meaningful perspectives on some of the emergent challenges individuals and collective groups encounter as they communicate, *despite* a perception of harmonious interests, shared learning goals, and seemingly favourable environments and resources.

1.5. Towards a problem of emancipatory informal learning

The emphasis on the social value of individuals feeling empowered through self-determined learning is grounded within the creation of knowledge that might act as an antithesis to oppose undesirable, dominant or institutionally endorsed cultural ideals (Freire, 1970 as cited in Elmore, 2017, p.28). In addition, as they transition between various social environments, hobbyists communicate through consuming or conveying knowledge formed through exposure to information, further mediated by the experiences of their preceding encultured life histories, including identity, perceptions, attributions and judgements, all of which might be further mediated by varying physical and emotional states. Other areas that might be problematised include the nature of learning definitions and contexts, when much

of their defining criteria seem to rely on the idea that learning is a process that stops and starts in direct relation to specific environments. Thus, concerns also surround conceptions of what it means for the individual hobbyist or collective to be learning *online* or *offline*, which is further compounded by a persistence within the literature to hold these two settings as disconnected and distinct (Eklund, 2015).

Whilst some characteristics of informal and formal learning are unquestionably different, *all* learner types are exposed to learning opportunities as they negotiate *all* presentations of their social worlds. More crucially however, these defining distinctions also foreground various challenges related to *whom* and *where*, along with under *which* conditions the transmittance of information might unfold (Bernstein, 1990, p.183) and also identifying the characteristics of those implicated within informal learning pursuits and the extent to which they might achieve emancipation from unnecessary socio-educational restraints. In addition, attempts by formal educationalists to understand influential forces within traditional education settings has prompted recent policy changes, producing radical learner-focused reforms (Wenstone, 2012). Furthermore, the literature from the traditional educational arena has identified the value of less formal learning methods, to acknowledge the worth of some of the more learner-driven aspects of lifelong and informal learning. As a result, it can be considered that traditional education arenas now have an enhanced understanding of the impact of influential educational forces, demonstrated through the educational literature base of the previous ten years (see McCulloch, 2009; Trowler, 2010; 2013).

The relatively sparse hobbyist-learning literature base unsurprisingly reflects its informal status and whilst efforts in the direction of the *citizen scientist* are welcomed, these individuals are arguably not representative of the broad spectrum of all hobbyists. Furthermore, the seemingly formal management of the role of the citizen scientist may hold its own influences that impact upon both its awareness and appeal. This introduces reflections that aspects of informal learning, by its very nature, cannot be wholly formalised without compromising its definition and also introduces paradoxical notions that offer little hope that the call for a wider analysis of its vast landscape might be answered. Likewise, hobbying does not demand the same type of policy attention as that identified through the

benefits of infomalising elements of formal education. This paradoxical situation serves to further highlight the fragility of exact definitions within educational arenas, however, in adopting the underpinning purposes of critical theory, these areas that produce perplexity can be embraced and acted upon, rather than abandoned as a result of their seemingly gridlocked ways (Steinberg & Kincheloe, 2010).

Finally, hobbyists' chosen areas of interest also exists alongside the presence of various indistinct and arbitrary links to other interests and practices within their *being*, with all corresponding activities and pursuits simultaneously enacting within and beyond the topic matter (Azevedo, 2011; Barron, 2006; diSessa, 2000; Hidi & Renninger, 2006; Krapp, 2003; National Research Council, 2009; Valsiner, 1992). Thus, an interest in *aquatics* is better understood as having a link to "many other concerns, domains, values, goals and practices in one's life space, which makes the practice of interests meaningful in the short and long hauls" (Azevedo, 2013). Therefore, considering the aforementioned Habermasian theory of communicative rationality and Foucault's emphasis on the presence of oppressive social forces, suggests that the act of meaningful informal learning as a hobbyist exists as (i) vulnerable to a wide range of influential social forces and (ii) that these may not be explicitly linked to the hobby itself, nor (iii) be fully comprehended by the hobbyist themselves. Therefore, a focus on hobbyists aims to encourage exploration of new individual, and social forces that may otherwise lie concealed through the misplaced assumption that informality and self-direction inherently create emancipatory conditions and free choices.

1.6. Researching with aquatic enthusiasts: the research context

As the chosen ethnographic field for this study will be aquatic hobbyists and their learning spaces, this section will briefly describe the characteristics that justify the field as one holding sufficient investigatory elements within it. Consequently, the participants in my project will be identified through the criteria of belonging to a designated aquatic club that meets each month. Additionally, participants will also have experience of enacting *some* of their hobby through spaces afforded by the internet, with involvement in the club's dedicated Facebook group welcomed but not necessarily required. As a reflection of the non-linear nature of informal learning, participants may also hold other group affiliations

and therefore their engagement with this project is not dependent upon exclusive membership of the specific club described here.

As I identify as an aquatic enthusiast (with further reflections in Chapter 4), I feel confident in asserting that the learning worlds negotiated by aquatic enthusiasts fully reflect a multitude of communicative activity mediated through various learning formats, modes, practices and spaces, thus I will briefly substantiate this position here. As mentioned earlier, the ornamental aquatic industry is one that extends to the majority of the developed world and whilst all identify as having an interest in aquatics, the industry invariably involves individuals with specific interests that become inextricably entwined with those of the hobbyist (King, 2019). The industry is also represented through print and online products of mass media, including hard-copy magazines and interactive social media platforms. Furthermore, various countries and cultures have a tendency to represent specific sub-disciplines of the hobby, with the U.K. also importing ornamental fish from a wide geographical span (DEFRA, 2015; Moreau & Coomes, 2007). These records serve to highlight how one aspect of the aquatic hobby - the actual *keeping* of fish – exhibits preferential differences across geographical spaces and are significant in at least acknowledging the breadth and depth of cultural variance that U.K. aquatic hobbyists might be exposed to. Even if concepts such as *specific cultural preferences* exist in the background, the Internet and all its incumbent interactive platforms all mediate communicative acts within the aquatic hobby in multiple and untold ways. The aquatic enthusiast, therefore, is exposed to a wide repertoire of information and resources, considering the resources of their historical counterparts for example, thirty years ago. Consequently, the nature and format of aquatic related individuals and their effects is arguably vast and therefore analogous to the popularity and diversity of the current state of the aquatic hobby itself.

In terms of the aquatic society employed for this project, its dedicated public Facebook group had 1,477 members (as of 28.09.18), with attendance at monthly meetings averaging between 70-100 members. The activity reflected through the dedicated Facebook group indicates that meeting nights will offer a correspondingly interactive and vibrant scene, with my own experience in the online group confirming it to hold a diverse hobbyist membership comprising aquatic journalists, published book and academic authors, museum curators,

retailers, collectors, conservators and breeders. Meeting nights also offer all members the opportunity to listen to speakers, exchange knowledge and contribute to debates and activities. Subsequently, I am confident that my chosen research context is a sufficiently rich and diverse environment.

1.7. Research questions and contextual expectations of the data

As a result of the combined elements of all the contextual, theoretical and practical considerations outlined so far, the principal question of this study is:

> What is the extent and effect of influential power relations within the communicative processes of hobbyists as agents of informal learning?

In order to address the overall aim, the following sub-questions will be answered:

1) How do aquatic hobbyists represent and understand the connection between the contexts of their *online* and *offline* learning spaces?

2) What is the nature and extent of communicative distortions within hobbyist learning spaces?

3) What are the *characteristic ways* that aquatic hobbyists understand these communicative distortions within their learning spaces?

For the purposes of this study, the terms within each research question will be bound by the following perspectives:

Research question 1: In relation to informal learning, the context of *online* refers to the condition whereby an individual act, system, environment or resource requires an involvement with an internet-based network in order to fundamentally exist. An *offline* context denotes any space where internet-based connectivity is not necessarily required for learning.

Research question 2: That participants represent some degree of motivation with *aquatics* will already be supposed through their existing online and offline club engagement. Therefore, for this particular question, the analysis of participants' narratives will involve finding occurrences that represent the inherent ideas held within the broader Habermasian *theory of communicative action*.

Research question 3:

The link between Habermas and Foucault is represented here through understanding the former's assumption that the humans' inherent drive to understand the extent to which they are free has become dulled by various communicative distortions. Therefore, the hobbyist may or may not fully or partially understand the extent to which influential social forces direct their thoughts, ideas and behaviours. Therefore, this question aims to highlight those instances where participants demonstrate representations that can be explained within the Foucauldian idea of the *care of the self,* which in turn relate to the extent to which unfair conditions might be recognised. Thus, this question is concerned with occurrences of distorted communication that reveal the extent to which (i) participants demonstrate an understanding of the extent of influences on their own or their peers' freedom and in keeping with the inherent nature of the *care of the self*, (ii) those instances within their narratives that also indicate the degree of its presence in the *absence* of the participant acknowledging this. Any instances of seemingly inadvertent strategic distortions might also relate to the *care of the self* and will therefore be of interest. It is these defining terms that will help determine the extent of extrapolation within participant narratives. Therefore, these terms are an attempt to protect against over-interpretation, misapplication or incommensurability associated with the research setting and findings.

1.8. Contribution of thesis

The assertion that distinct boundaries exist between formal and informal types of education is duly bolstered by each having a particular definition. Furthermore, additional differences are foregrounded considering that formal education requires regulatory levels of hierarchical governance to establish criteria related to the standardisation of national outcomes. Therefore, formal settings have their arrangements of disciplines, learning aims, objectives and assessment techniques largely pre-determined, whereas hobbyists' curricula

are self-directed, voluntary and neither require nor demand any form of policy intervention. Furthermore, over the past 30 years, progressive reforms have gradually been embedded to replace various overt and covert forms of restrictive, institutional controls over the student – forms of power that would now be considered unjustifiable and unenlightened. In addition, these formal change initiatives reflect some of the emancipatory choices found within informal learning spaces, such as self-directed study and peer support. Additionally, formal educational domains have also implemented other emancipatory mechanisms that align with the ideal conditions for speech, to permit (i) the identification of an opposing voice and (ii) an open channel of mediation from *oppressed* to *oppressor*, along with (iii) a willingness for the oppressed to acknowledge the oppressors' concerns and (iv) the creation of a space through which these concerns might be discussed by those affected or their democratically nominated representative. That injustices might remain within formal educational domains is not disregarded in this closing argument, what is important, however is acknowledging the Habermasian concept of *practical intent,* (Roderick, 1986, p.7) meaning *theoretical* change can translate into *demonstrable* change, despite the fundamental caveat from critical theory warning that enlightenment, whilst removing one struggle, might also create another. What is important, however, is that a space for rational debate, by all involved, *can* occur under formal learning conditions.

In considering these recent formal policy shifts and the aforementioned complexities found within the fluidity of learning and therefore, the formation of ideas and beliefs, the defining lines of *formality* and *informality* become particularly indistinct. This means learners of *any* type are broadly free to access learning environments replete with modes and resources that are arbitrarily available to all. Therefore, if formal educational policy makers wish to implement further transformational reforms by adopting other seemingly attractive aspects of informal learning, there should be some firmer assurances that informal learning environments and their discourses indeed comprise the progressive and emancipatory benefits symbolised by its fundamental existence, definition and appeal.

1.9. Overview of thesis

Having outlined a rationale for exploration of communicative distortions within the informal learning spaces of hobbyists throughout this chapter, the remainder of the thesis will be

structured as follows. Chapter 2 will offer further detail on the relevant aspects of Habermas and Foucault's theories and ideas, with a particular focus on the ways that elements of everyday life - including social norms - act as an influential mechanism in terms of communicative distortions.

Chapter 3 will critically discuss the relevant literature, with an emphasis on the types of communicative spaces and modes that aquatic hobbyists are likely to inhabit and adopt. Therefore, attention will be given to communities of practice theory and motivational influences therein, perceptions of the online/offline self and examination of the idiosyncrasies produced as a result of the digital age. The literature concerned with informal learning environments, context and culture will also undergo critique, along with ontological and epistemological matters associated with knowledge and beliefs. Chapter 3 will conclude with considerations on alternative social theories, along with justification for their rejection. Chapter 3 will also offer considerations on alternative social theories, along with justification for their rejection.

Chapter 4 will be concerned with methodology and methods. Firstly, there will be an outline of the research paradigm, followed by a demonstration of the link between the ethnographic study design and research aims, along with a detailed account of the research fields. This chapter will continue with details on participant recruitment, methods of data collection and a clear rationale for the data analysis techniques. This chapter will conclude with reflections on validity, the extent of an insider/outsider divide, as well as a short section on ethical considerations and a note relating to the presentation and format of the findings and discussion to be found in Chapter 5. Thus, the findings and discussion of this study – as presented through participant narrative and fieldnotes can be found in Chapter 5.

The project as a whole, including a response to the research questions, limitations of the study design and theoretical approaches and the implications of the findings for future research will be outlined in Chapter 6.

1.10. Chapter summary

In assuming *communication* as the foundation for transference of knowledge and information, the key points outlined so far relate to the various semantic, normative and moral complexities faced by hobbyists as they learn against a backdrop of the social world. Furthermore, that acts and modes of communication itself have the ability to contribute to the formation of individual beliefs, values and allegiances - whilst also serving to reinforce and reproduce social norms - holds implications in terms of creating a necessary condition of symmetry across all communicative informal learning spaces. Finally, that aspects of informal learning appeal to traditional educational domains lends further support to the aims of this research, as does the literature calling for a better understanding of the informal learning landscape in general. In turning to this project's theoretical lens, the following chapter will further outline the relevant areas of Habermas and Foucault's ideas.

Chapter 2 - Historical and theoretical context and perspectives

2.1. Chapter overview

In forming a justification for appropriate theoretical choices, I will identify concepts that link not only to hobbyists' learning within the social world but also to representations of their individual and social *self*. Therefore, this chapter will begin with a brief introduction to critical theory, followed by an outline of Habermas' *communicative action* through his concept of the *lifeworld* and its associated effects (Habermas, 1987). This will be followed by engaging with Foucauldian concepts, namely his idea of *governmentality* (Foucault, 1991) and *the care of the self* (Foucault, 2020).

2.2. A critical theory approach and hobbyists

As a theoretical movement, critical theory is an approach that allows foregrounding of the ways that humans are prevented from gaining a full understanding of how influential forces affect their lives (Jones, Bradbury & Le Boutillier, 2012, p.52). In fundamental terms, therefore, the underpinning purpose of critical theory aligns with groups of hobbyists who take advantage of their various cultural freedoms to engage with interest-focused learning. That Foucault had a desire to belong to *any* theoretical movement is questionable, (Foucault, 1972, p.19), with his work framed to be a challenge to the purpose of critical theory (White, 1986). What is clear, however, is Foucault's dedication to matters of invested power across all social domains, therefore, his insights hold useful implications for both the individual and matters of education (Devine-Eller, 2004, p.1). Before an outline of Foucault's ideas, this chapter will return to Habermas through outlining his relevant aspects to this project.

2.3. A theoretical account of a socio-cognitive process

It is widely accepted that in an era when foundationalist theories were not considered particularly *de rigueur*, (see Rorty, 1980) Habermas was resolute in his belief that *some* socio-theoretical foundations might originate within presuppositions of shared language (Durand-Gasselin, 2018). Thus, Habermas' partially foundationalist assumption was based upon a 'rational dimension' located within all communicative acts; that is, the imperative for all vested communicative parties to have a desire to reach *understanding* (Roderick, 1986 p.

12). Moreover, the *absence* of *meaning*, for Habermas, foregrounded the *existence* of *perplexity* and considering the illogical futility of entering into a communicative act with the expectation that *no* meaning be found, Habermas was further satisfied that *finding* meaning occurred as a fundamental aspect of all communicative processes. Subsequently, in order to *find* meaning, humans constantly reconcile the influx of communicated information within broader personal and socially bound contextual backdrops (Habermas, 1987). Therefore, in applying this to hobbyists, at some point during their learning processes, instances of *perplexity* exist, before they are transformed through *understandings* into *meaning*.

2.3.1. *Finding* meaning within the *lifeworld*

Habermas positioned his version of the *lifeworld* (Habermas, 1987) to represent how individuals might produce, reproduce or reject beliefs as part of everyday life. The concept reflects an endlessly shifting network of contextually available resources and subsequently embodies various personal and shared cultural cues. (Habermas, 2018, p.69). Thus, each manifestation of a human's lifeworld inherently contains mundane, pre-interpreted information that demands minimal cognitive processing, all of which offers the human a repository of instantaneous meanings ready to mediate one thought to another, or to convert a thought into action. Therefore, Habermas defines his conception of the *lifeworld* as an autonomous resource which, 'stands behind the back of each participant in communication' (Roderick, 1986 p. 119). Furthermore, as Habermas emphasises the role of *shared language*, like-minded individuals such as hobbyists might also share various characteristics of their lifeworlds with each other, however, whilst cultural characteristics can overlap, it would be unwise to assume that all aquatic hobbyists' lifeworlds necessarily comprise identical elements. This caveat is based upon the arbitrary nature in which the lifeworld is able to both accumulate and reiterate information, along with the effects of attendant environments, intra-hobby interests and experiences through which lifeworld information derived.

2.3.2. The *horizon* and the *ground*

The story so far is one that represents the human from birth as possessing a pre-existing set of ideas and beliefs that are being constantly formed through an ongoing process of

reflective and connected experiences and observations. Thus, Habermas offers the metaphor of the *horizon* to represent the various contexts that humans encounter in everyday life (Flyvbjerg, 1998). Subsequently, just as the horizon may shift in relation to the position on the ground, the ground always remains tangible and fixed to represent a figurative anchor - that regardless of the speed of the journey - holds the individual to a particular social context until they move forward again. Subsequently, the view afforded through observing the horizon would represent all the characteristics of a contextual experience – which would also shift in relation to rate and direction of travel. In drawing from Piaget (1936) to emphasise this schema-based element, Habermas also reformulated aspects of Hegelian themes by acknowledging an individual's *rational history,* that is that products of reality are largely able to be *plausibly* described and therefore categorised, further supporting language as a shared cultural asset (Habermas, 1987). Consequently, human accounts of social organisation can exist with collective meaning *beyond* a single human.

In aligning the metaphors of the shifting *horizon* and *ground* to learning, the hobbyist is also vulnerable to information, contexts and experiences existing in degrees of familiarity, availability, negotiability or visibility. Habermas, therefore, suggests that whilst hobbyists will have many contextual learning perspectives running through their lives, they will also encounter some limits of thought that relate to their orientation within a particular experiential landscape. That said, aspects of these practical limitations might be offset by the lifeworld's ability to draw upon *all* the pre-existing assumptions gathered through information encountered so far.

2.3.3. *Thematization*

Just as the intricate web of the lifeworld is constantly ready to offer confirmatory information to produce meaning, Habermas suggested that it is acts of *communication* itself that inadvertently or purposefully introduces disruptions to information within the lifeworld and the subsequent ideas that might settle back as a new or reaffirmed representation of a belief. Thus, he termed *thematization* as the process that represents a temporary interruption to the flow of meaning-making between individual and lifeworld (Habermas, 1987). In upholding the purpose of critical theory, Habermas positioned such pauses to the

lifeworld – however fleeting - as highly significant. The pause, therefore, would reflect an instance whereby *something* just does not *seem* to fit. Thus, interruptions might be triggered upon realisation that new experiences render existing assumptions inappropriate, redundant, confusing or ill-fitting. Thematization, therefore allows (i) any disturbance to the ability of the lifeworld to find meaning to be acknowledged and (ii) allow a process of *rationalisation,* through reflection of all associated factors, to eventually allocate meaning. This process was for Habermas, a form of individual and social empowerment.

Thematization of the lifeworld also offers a form of justification for tacit individual constructs such as *intuition,* whereby the person senses a suspicion that information might be untrustworthy or require further analysis. An example, therefore, that relates to learning includes triangulation, whereby multiple sources of knowledge might produce various entanglements of potential meaning that require closer analysis (Salkind, 2010). Therefore, a process of disentanglement is needed to provide an indication of the value of the *combination* of knowledge sources in an attempt to determine worth.

In addition to triangulation, the idea of the threshold concept (Meyer & Land, 2003) also relates to the notion of thematization. Thus, in formal educational domains, a threshold concept would represent a deeper type of learning that involves emotional and cognitive processes. Thus, a hobbyist would encounter a problem which results in recognition of a gap in their knowledge, made visible through a new influence that introduces doubt within existing understandings, which no longer feel applicable. Ultimately, overcoming a threshold concept can be useful to describe those learning instances that through the realisation and closure of the *liminal space*, are able to produce memorable, transformational and therefore significant learning experiences.

Where the disruptive effects of communication have the most consequence, however, lies within the *frequency* that thematization is called upon to help bridge the gap between what is known and what is not (Fairclough, 2015, p. 200). Consequently, the more instances that the lifeworld pauses to initiate *thematization* is both symptom and cause of distorted communicative acts. Therefore, the fundamental condition associated with the human drive to *find* meaning within communicative acts, contrasts starkly with the conditions that

might motivate its *production* and *acceptance.* As a result, Habermas, devised the ideal conditions for speech as introduced in Chapter 1.

2.3.4. What *should* be, *could* be, and what *is*

The *ideal speech situation,* according to Habermas embodies five necessary constructs for the optimal conditions for fully inclusive, participatory discussions. These are: *mutual understanding*, being *truthful* and having *sincere expression*, a *right to speak* and *social order* (Habermas, 1984). Simply put, all invested individuals will produce authentic debate, providing all strive to understand each other and speak their truth, without an agenda to purposively manipulate, dupe or conceal information from others. All parties should have an equal turn to speak and this should be performed civilly.

2.3.5. *Producing* ethical meaning: The truth about lies

Habermas' theory of communicative action also represents a fundamental ethical element, as represented by an equally fundamental requirement: If an individual intends to always communicate the truth, regardless of the nature of that truth, that the individual communicated *their* truth, implies an absence of manipulation. Therefore, if the recipient receives an undistorted, truthful account of a state affairs, their own starting point for enquiry is then based on the rational products of the communicator.

Habermas believed that the only force presence in this situation would be the *unforced force* of *all* parties holding a desire to locate and agree upon the better argument - regardless of the origin or final designation of the particular truth. Furthermore, communicating in the absence of distortions also reproduces freedom and justice. Likewise, if an individual intends to be dishonest, then rational discussion *immediately* becomes untenable. Consequently, the *ethical* aspect is not an expectation that all parties will ultimately share the same moral perspectives. Rather, it is that all communicative parties share the same desire to speak their truth, free from tactical manipulations.

Habermas referred to these undesirable, disingenuous and disruptive forces as *strategic actions* (Habermas, 1987). Therefore, in considering that the lifeworld is constantly accumulating information in order to reaffirm or add fresh meaning to newly encountered

experiences, that a distorted unit of information became stockpiled means that in the future, this information – although still able to *produce* meaning - the meaning cannot represent a version of a truth from that point on. It is not only the production of false or insincere expression from others, however, that serves to disrupt the smooth running of the lifeworld. These wider social effects will be discussed below.

2.3.6. The *system*

Habermas also emphasises distortions that lie outside of the direct control of the human. Thus, the *system* represents those seemingly objective forces – that is, not explicitly created by individuals – that influence the human to act in ways that the autonomous lifeworld would not. Therefore, if the *lifeworld* is the *home* of all meaningful communication, then the *system* is the *homewrecker*. Thus, Habermas describes *systems* as forces originating from *steering media,* which in social terms, are expressed through the unavoidable effects of *economic* and *State* power (Habermas, 1987, p. 73). Furthermore, *systems* directly relate to an individual's state of emancipation based upon their ability to pervade and disrupt the obliging nature that *should* be provided by the lifeworld and accounts for how each separate cognitive interest might become adversely entangled, serving to obscure their necessary distinctness, whilst risking the prominence of one interest to the detriment of another. Habermas used the term *mediatization* to describe the relationship between steering media and the lifeworld (Habermas, 1987, p.73; Kunelius & Reunanen, 2012)

Habermas argues, *steering media* can overtly or subtlety, whether intentionally or inadvertently, conceal human understanding of the influences of whole *systems,* including its related mechanisms, their provenance or contextual meaning. Furthermore, just as the lifeworld comprises a degree of arbitrary, yet helpful, pre-interpreted information necessary for ongoing critical engagement, steering media embody a corresponding force of oppressive, authoritarian logic that resists any requirement for individual will. Thus, these steering agents force humans toward activity that neither necessarily requires meaning to be found, nor a consensus to be agreed upon. In other words, for some areas of life, steering media have assumed the position of the interpreter, with the individual at the mercy of the effects of these translations. Subsequently, as will become evident as this thesis progresses, it is the counter-enquiry relating to the extent that prevailing social

conditions allow the individual to *understand*, *locate* or *represent* their truths that are of specific interest here.

2.3.7. Colonisation

It was Habermas' intention to reformulate critical theory to shift away from what he perceived as the aporias and nihilism of Adorno and Horkheimer before him. Thus, in order to begin this reformulation - his new account - whilst remaining critical, also had to be applicable to the iterations of social reality that it would represent, along with the inherent individuals and normative values that lay within it. Consequently, it is these very normative values that permit steering media to hold their concealed presence within the lifeworld to hold influential effect within such mundane assumptions and beliefs. Habermas termed this inevitable disruption *colonisation* (Habermas 2018, p.73) and explained it as attributable to a greater extent within contemporary societies, compared with eras of enlightenment and post-enlightenment. Moreover, Habermas had already charted issues concerning modernity in his earlier work: *The Structural Transformation of the Public Sphere* (see Habermas, 1989). Thus, much like his account of the downfall of particular modes of public activity in response to emergent capitalist cultures simultaneously producing (i) separate distinctions of social class that then (ii) occluded the visibility for an identifiable general social struggle applicable to all, Habermas has now set the scene for how the seemingly enlightened but fragmented progression of modernity further disrupts communicative acts. Whilst appreciating that the process of rationalisation is inherently emancipatory, Habermas explains that the concept itself struggles to operate successfully within the contemporary landscape, primarily due to dilutionary effects of the products of modernity, but yet in a world still directed and bound by social norms, values and interests. Thus, issues relevant to hobbyists' learning environments and the influences inherent to *mass culture* (Jones, Bradbury & Le Boutillier, 2012, p.54) and the concept of the *hyperreal* (Baudrillard, 1988) will be re-visited in the following Chapter.

2.3.8. Who needs who*? Parasite* vs *host*

The presence of steering media within lifeworlds can therefore lead to a breakdown in psychological, sociological and therefore, educational integrity through consumption of various apparent or concealed distracting and authoritarian messages. Furthermore,

Habermas positions systems as *parasitic* to their lifeworld *host*, with the *system* wholly dependent on the lifeworld in order to exist with meaning (Flyvbjerg 1998). Considering colonisation by mass media outlets - without the world to report on - their function and relevance would cease.

This *parasitic* dependency also means that systems constantly adapt their form to ensure they exist with relevance. Therefore, that they might be capable of duping the individual through such adaptations means the individual should remain vigilant to possible instances of their presence and effect. Taking into account the reoccurrence of various atrocities of global and civil war, violent territorial disputes and economic crises of the 20th and 21st Centuries and amplifying a Weberian stance that the seemingly rational products of empirical or scientific investigation also hold the ability to conceal notions of political or moral affiliation, (Habermas, 2018, p. 8-9) Habermas proposed that 'philosophy can no longer refer to the whole of the world, of nature, of history, of society, in the sense of totalising knowledge' (Roderick, 1986, p.107). Furthermore, as a German citizen who survived the second world war, Habermas rejected accusations that his applications of contextual meaning offered naive answers to the social struggle. Rather, his perspective attempted to minimise the oppressive effects of attributing a justified belief outside its original context.

There is, however, a stark realisation that parasitic *colonising* products of mass consumerism play an important role in the aquatic hobby. Without commercially available aquaria, retail outlets and all the associated paraphernalia, including an industry capable of traversing international borders to permit the trade of aquatic animals, the hobby would struggle to exist. Furthermore, technological affordances that enable communication between individuals and groups across vast geographical and cultural divides also plays a part in maintaining a diverse hobby scene. Consequently, the parasitic effects of systems within the lifeworld become inextricably entwined with the project of emancipation, as demonstrated by the aquatic hobbyist also holding a similar parasitic relationship with the commercial interruptions of steering media – some of which are desirable and some, less so. It is precisely these types of scenarios that highlight the continuation and persistence of social contradictions, along with the now centuries old issue concerning the extent to which

enlightenment solves social problems or simply produces different, yet equally troublesome ones.

To briefly summarise so far, in demonstrating *interrogation*, as triggered by the presentation of a suspicion, Habermas showed how an initial inability to position new information with existing assumptions can prompt a natural process of enquiry. Furthermore, focusing on the possible merits of seemingly incongruous or alternative viewpoints, might also allow the individual the opportunity to determine who might be best served by the encroaching ideas of others. Therefore, in order to find rational meaning in all that the world might communicate, Habermas explained that the individual must negotiate potential distortive entities through a combined awareness of both their incidence and the critical engagement of their contextual relevance.

2.4. Foucauldian *conflict* and *power*

Foucault's beliefs on influential social forces centres on the fundamental idea that power and knowledge are inextricably and reciprocally linked, with each being a condition for the other (Foucault, 1980, p.109). Foucault's legacy is as vast as it is complex, not least due to his own ongoing project of modernity, that translated into stark differences between his early works and those produced toward the end of his life. In addition, that he left much of the theoretical interpretation of *how* to undertake his enquiry up to the inquisitor, serves to introduce its own influential force. On one hand, the absence of specific detail is somewhat emancipatory, however this is always coupled with *some* insecurity that deserves a corresponding and on-going degree of management. Therefore, the following justifications aim to buffer any emergent theoretical *interpretive* anxieties through a defence of demonstrating how Foucault's ideas might translate into *my* understanding of a workable analytical framework.

2.4.1. *Discourse* and *epistème*

Regardless of historical era, Foucault explained that various representations of reality, as produced through certain environments created bodies of knowledge, both characterised and upheld by related behaviours, including thoughts, language and speech (Foucault, 1972, p.28). Foucault termed these knowledge-environments, *discourses*, with the *educational*

discourse or the *medical discourse* serving as examples (Foucault, 1972, p.36). Additionally, *discourses* are able to survive and pervade throughout history and as they become detached from their origins, the passing of time acts to conceal aspects of their contextual provenance (Foucault, 1972, p.41). Furthermore, Foucault also explains that humans are unavoidably exposed and predisposed to constituted power through multiple overlaps in *discourses* and it is through these, often competing *discourses,* that humans are influenced to acquire inherently power-laden accounts of their world– termed the *epistème* (Foucault, 1972, p.211). The Foucauldian *discourse* and *epistème*, therefore, would represent the language, shared values and norms of a particular group, subject-area or culture. Likewise, aquatic hobbyists' discursive and non-discursive practices would reflect various accepted norms and beliefs, mediated through and bound by the limits of the linguistic descriptions through which they are understood.

2.4.2. *Governmentality* and disciplinary acts of power

In Foucauldian terms, *governmentality* refers to the effect of accumulative and preceding cultural *histories* and the production of dominant norms, which despite their seemingly passive existence, serve to subtly control individuals in ways not necessarily acknowledged at the conscious level (Foucault, 1978; Lemke, 2019, p.x). Foucault re-framed *historical accounts* as sole representations of mainstream ideals - and despite the simultaneous production of multiple viewpoints – this ascendency ensured only dominant discourses persisted to become *the* version of events. Thus, Foucault considered examination of *history* as an emancipatory tool, whilst also cautioning against the idea that it is a *linear* occurrence produced through neat, progressive accounts (Foucault, 1972, p.7). His *archaeological method,* (Foucault, 1972, p.6-8) therefore, relates to *delineating* the rules and regulations that dominated and motivated fields of knowledge in any era in order to appraise (i) what might be missing to then (ii) encourage thought around alternative scenarios, with a (iii) re-imagined protagonist helping to reveal marginal or subjugated views.

Foucault positioned humans as self-conscious beings, generally able to reflect upon themselves and their actions, however, despite this *reflexivity of the subject*, the human self could only be 'formed' or 'produced' in relation to the constituted characteristics of their socialisation (Lemke, 2019, p. 108). Thus, Foucault positioned knowledge as *disciplinary*

knowledge, produced through *disciplinary acts of power*, subsequently mediated by three main social components: *hierarchical surveillance*, *techniques of control* and *normalisation (*Foucault, 1991, p.177*)*. Hierarchical surveillance techniques include citizens being observed and monitored through his idea of the *Panopticon,* described as "an instrument and mode of intervention and power which can be implemented in hospitals, workshops, schools, prisons" (Foucault, 1991, p.205). Therefore, Foucault positions metaphorical surveillance techniques as present within all social domains, regardless of any overtly punitive associations. Thus: enlightenment served 'not to punish less, but to punish better; to punish with an attenuated severity perhaps, but in order to punish with more universality and necessity; to insert the power to punish more deeply into the social body' (Foucault, 1991, p.82).

Foucault also emphasised the control exerted upon free will through partitioning space and time – 'establishing sealed compartments' - such as rules and procedures governing recessional activities in schools and workplaces; features that become assumed as unthreatening or even desirable through both a creation of need and their general mundanity (Foucault, 1991, p.172). Furthermore, he believed that the separation of the social world into distinct representations of modes of *being* – the *discourse* - only served to further condition the individual to expect particular conditions at particular times, within particular contexts. Foucault also argued that in addition to written documentation, general systems of power create an expectation of reciprocated, enunciative communication, through the function of *speech*. Foucault used this *imperative to speak* (Foucault, 1990, p.19) to stress that when humans are called upon to speak, the interrogator expects a spoken reciprocation; with the exercising of silence under cross-examination seen as a form of self-realised power. This power, however, soon fragments under the socially constructed decree that to *not* speak, serves to indicate *guilt* (McNichol Jardine, 2010, p.65).

Foucault asserted that the awareness of these rules and procedures, as social and institutional norms, created techniques to control individuals through fear of *judgment* and *punishment* and also expectations of *reward*. Therefore, in some ways, these techniques align with intrinsic and extrinsic motivations outlined in Chapter 1, with the normalising 'faceless' gaze acting as an influential determiner of human drive (Foucault, 1991, p.214). Foucault termed these techniques as *capillary actions* (Foucault, 1990, p. 14) to highlight the diffuse ways in

which social effects exert control over the body. These *normalising techniques*, created through archives of *disciplinary knowledge*, allowed sets of expectations to become culturally embedded. Subsequently, Foucault described humans as becoming nothing more than an *object* through the capillary effects of socially prescribed rules.

2.4.3. *Docile bodies:* The self under siege

The *self* now appears to be metaphorically under siege, holding little control over oppressive social forces. Furthermore, individuals become vulnerable to hierarchical systems of *command* through various state effects, such as military training, which transforms humans into agents permitted to legally kill (Foucault, 1991, p.135). Outside of a *war policy* context, however, the same individual would subsequently be penalised. Foucault used this example to emphasise that the state holds sufficient ability to produce individuals that act in extreme ways relative to specific environments or contexts. Thus, power effects are also produced through a dependency upon additional regulatory frameworks that justify a need for such tactics in the first place; this human acquiescence of self-control being described as a *docile body* (Foucault, 1991, p.136).

Despite an awareness of the ways in which humans are state-controlled, any manifest feelings arising from their oppression would face constant erosion through the dominance of regimented, established systems that assume additional power through creating social conditions that produce dependency, further amplified through the awareness of inescapable negative consequences for those who dare to challenge. Crucially for Foucault, this deference, consciously realised or otherwise, plays a significant role in the ability for individuals to (i) challenge instances of personal or social inequalities and (ii) recognise instances of the unmerited motivations of those in power, and therefore (iii) understand the extent of their oppression. Foucault suggests that the *self under siege* has now been sufficiently manipulated to present with symptoms of a metaphorical *Stockholm Syndrome*. Thus, in returning to the example of the soldier, it becomes their *normal* to act under the control of a superiorly ranked individual. Whether they agree or disagree with an instruction is irrelevant and they execute it regardless of their own volition. Applied outside a military context, institutional policies and procedures also offer ways to *be*, that for Foucault, removed the majority share of individual choice (Foucault, 1991, p.137).

A consequence for the docile individual, therefore, means that requisite contemplation to locate the extent of a moral or unjust act no longer needs to occur; it lies redundant, bound within an assumption that any such concerns arrive already sanctioned by those in command. Here, a subtle shift in *thinking* and *being* emerges, as the docile individual now bypasses their own desires to look only for the regulatory elements for guidance.

2.4.4. *The care of the self*

Foucault's historical analysis demonstrated that the introduction of organised religion, through early forms of Christianity, foregrounded a communicative shift from a Stoical *private* self to a deferential *public* self. Thus, the Stoics identified less with finding *fault* in wrongdoings and more with acknowledging errors as indicators for improvement through self-regulation, dialogue and observation (Foucault, 2020, p. 59). Thus, Christianity encouraged announcements of the *flawed* self through disclosure of sin to a representative of God – which become a widespread observation. The differences, therefore, between requirements expected *of* and *by* the public or private self can be understood in terms of the acceptable social limits and behaviour these rules produce. Therefore, the daily honing of the *Stoical self* through incremental knowledge-building and working through problems to understand their consequences, was replaced by the *Christian self*, namely one fixated by a constant contemplation of God - and the more concealed practise of the *confessional* (Foucault, 2020, p.62).

Foucault also understood the power of *judgement* as able to create a type of *illegal market* for those thoughts and actions deemed socially undesirable, through 'power of mind over mind' (Foucault, p.206). Consequently, individuals might be driven to override this self-trickery, meaning they could still behave in ways that went against convention; however, these acts would occur only in private – forced *underground* through a lack of general tolerance – so that they become *taboo* (Foucault, 1985, p.157). That perceived words, concepts and behaviours became off-limits also introduced an alternative range of substituted language choices, known as synonyms or euphemisms. Such understatements served to meet two aims, (i) that the meaning behind a socially undesirable act can continue to be discussed openly by avoiding controversial terms and (ii) that this substituted

avoidance also indicates an awareness that the original form is not acceptable - thereby emphasising ones' own moral and ethical integrity.

In aligning with *docile bodies*, Foucault suggests that religious conditions produced a human with a *diluted* self, complete with a seemingly appealing *get out clause* that – should they commit an immoral act – they need only divulge it and seek forgiveness. Furthermore, the social conditions that produce either moral *or* immoral behaviours become entirely *normal* through a visibility embedded within expectations that, regardless of the extent of morality, preservation of a principled society is the primary ethical goal. Therefore, deferring to one's own innate ability to practise self-reflection is a very different method of *being* when contrasted against passively acceding to a God for absolution of guilt, particularly when considering matters of purposeful action, responsibility and morality (Foucault, 2020, p.41).

2.4.5. Attempting to untangle undetectable chains of oppression

In returning to the symbolic representation of *Stockholm Syndrome*, whilst also acknowledging its psychological roots within attachment theories (Adorjan, Christensen, Kelly & Pawluch, 2012), serves to demonstrate how individuals might become ascribed to values and beliefs that, if subjected to alternative influences, they might not. Consequently, Foucault offered the *incarcerated self* a chance to attempt hostage negotiation through foregrounding that in order to *observe* a rule, one must be *aware* of it. Subsequently, Foucault's message within *the care of the self* is now driven by guiding the human to understand not only their acceptance of oppressive acts, but also how *they* might allow themselves to be manipulated by others. Therefore, in much the same way as Habermas urges *all* social individuals, oppressed or otherwise, to strive to produce the conditions for ethical debate - whilst also realising there are multiple reasons why this cannot always happen - Foucault offers a similar message. Thus, he urges humankind to seek:

> "Those intentional and voluntary actions by which men not only set themselves rules of conduct, but also seek to transform themselves to change themselves in their singular being, and to make their life into an oeuvre. (Foucault, 1985, p.10-11)

For Foucault, the route to individual and social emancipation involves existing within a constant state of hyper-vigilance toward detecting the presence of potential injustices against the self, that also include those that are *self-imposed*. Thus, Foucault urged the individual to actively embrace ongoing self-development as a project that might never reach a proper or natural end. Whilst devoid of any specific rubrics, such as those offered by Habermas, the aims of *the care of the self* are arguably as enlightening.

2.5. The relevance of Foucault and Habermas within hobbyists learning spaces

There is now an urgency to critically synthesise the elements of these theories to form an understanding of how they can be applied within an empirical project such as this. Thus, the partial similarities between the *horizon* of Habermas and the Foucauldian *discourse* become apparent: with each conceptually offering the individual appropriate frameworks to find meaning. Foucault's discourse, however, exists as the sum of various controlling effects, meaning every truth – strategic or otherwise - represents some form of inherent power. Therefore, additional criticisms relate to Habermas' ideal speech conditions. Thus, regardless of the degree of perceived fairness of access, understanding, sincerity, listening, impartiality or patience, Foucault would asset that the final condition of being truthful can never fully occur. It is under these terms that the Habermasian concept of thematization also terminates. There is, after all, no need to pause and think about a state of affairs if (i) the lifeworld contains only normalised and therefore acceptable ideas and (ii) if actions are sanctioned from a higher command, there is an element of perceived safety bound within the response, which when observed can only ever represent a limited amount of conventional effects. Additionally, within Habermas' arena of ethical debate and despite the awareness that one will *not* be judged - for Foucault - becomes irrelevant. He would respond with the assertion that the power of the gaze is sufficiently controlling to ensure that the limit of a spoken truth corresponds directly with the limits of what the individual perceives to be a satisfactory, *normal* response. That one might think *any* type of thought at all, therefore, seemed the last territorial stronghold of individual freedom in a society now geared towards control through human *visibility,* realised through both the mechanism of existing *within* and *outside* of conventional norms.

Personal empowerment and emancipation have so far been framed as welcomed components of voluntary learning undertaken by hobbyists. In Habermasian terms, this emancipation is realised through foregrounding constructs of consensus, empathy, rational interrogation, morality, accountability, patience and tolerance. Habermas also suggests that his *lifeworld* is vulnerable and therefore liable to degrees of too much, too little or an absence of thematization as a result of communicative distortions. Consequently, in the event that any of these three forces arise, hobbyist learning could become disrupted. Foucault on the other hand, would assume a starting point of analysing for the presence of *inherent* conflict within the hobbyist landscape, based upon the assumption that communication is already distorted as a consequence of the social systems in which it arose. Furthermore, Foucault's ideas foreground suspicions relating to the appeal of 'the better argument' and the conditions that unfold to permit an individual to gain influence over another. Thus, Foucauldian approaches suggest that various presentations of social power produces (i) distortions to the self that produce a passive and unassuming hobbyist, lacking in (ii) the compulsion to question instances of their oppression and (iii) that this subjugation implies a hobbyist's motivations are not only distorted by power, they are also created and produced in response to such distortions, to serve as a replacement for their truth. Therefore, it is the extent of the awareness of this occurrence within hobby learning worlds that will be of interest here.

2.6. Chapter summary

In offering a detailed insight into the fundamental elements that lie behind the chosen theoretical frameworks, this chapter's aim is threefold. Firstly, the information outlined here demonstrates a link between the characteristics pertinent to hobbyists' informal learning spaces and the untold ways in which influential power relations might take effect. Secondly, the elements of theory defined here also work to retain *communication*, *power* and *learning* as the central units of analysis. Thirdly, in positioning the study's findings alongside the finer details of these key theoretical areas aims to enable useful analytical discussion beyond mundane description. Thus, in continuing this investigative approach, the following chapter will critically appraise the literature relevant to this project.

Chapter 3 – Contextual appraisal of the literature

3.1. Chapter overview

This section aims to concentrate on the key areas within the literature that directly relate to the research questions. Furthermore, this project aims to examine the learning practices of hobbyists within a context of (i) notions of a divide between perceptions of *online* and *offline* social learning and (ii) the incidental disruptions to communication. This also lends an innovative aspect to the scope and originality of this work. Thus, this chapter, will critically discuss aspects of social learning attributable to hobbyists, beginning with a note on the origins of this project, followed by an explanatory outline of the nature and boundaries of the literature.

3.2. Project origins

The origins of this study are grounded within a small feasibility-type online study carried out in May 2015 in Part 1 of this doctoral programme. This previous qualitative project was based around gathering empirical narrative from a small group of online aquatic enthusiasts to determine the extent they might be classed as an online CoP (Lave & Wenger, 1991; Wenger, White & Smith, 2009). Subsequently, this line of enquiry was confirmed, however other findings also emerged, including accounts of various interruptions to their hobby as a result of the activities *within* their online worlds. Participants explained these distortions as conflicting advice, cultural and geographical differences, forum reputation systems, peer attitudes, unwanted comments, peer language, individual differences, inability to debate, retail knowledge gaps, persuasive peers, majority voices, complacent practices, frustrations at repeating own advice, derailment of advice, avoidance, obligations, old school enthusiasts, incomplete information, trust, propagation of myths, *hive-mind*, perpetuation of views and the *echo chamber*. Subsequently, that online aquatic enthusiasts encountered interruptions to their learning was evident, yet all the characteristics of a seemingly thriving online CoP were also present. Therefore, the shortfall in aquatic hobbyist literature can, in some ways, be ameliorated through analysis of the vast CoP literature – both within the physical and online space. Thus, the following sections will critically discuss the characteristics of CoP and its various related spaces.

3.2.1. Research context, literature and secondary data

Literature searches using various key search terms were initially carried out in order to offer an idea of the landscape of hobbyists as informal learners. This initial search subsequently directed me to additional sources promising useful content. Also, as the interview process ensued, and in alignment with an *imaginative* ethnographic approach (Willis, 2007, p.viii), other emerging themes directed me to additional ideas and concepts that compelled me to hunt them out in both published domains and in applied, everyday iterations. Moreover, in a thesis focused upon social learning, secondary resources were considered important in determining the nature and course of my own thought processes, whilst also generating discovery of unfamiliar authors, concepts and phrases. Thus, reading, watching and interacting with products of mass media, such as newspapers, podcasts, weblogs, videos, social media and television programmes, along with informal conversations with friends, acquaintances and my participants, helped shape the project overall. Relevant secondary activities and reflections will be reflected in my ethnographic fieldnotes and used as data, where applicable, in Chapter 4.

As the above section outlined, aquatic enthusiasts are representative of a type of community of practice, replete with individual hobbyists holding various permutations of skills. Furthermore, such communities also seem to hold and produce various types of influential forces. Thus, as this chapter will focus in part on the communities of practice literature, it is useful to stress the link between *practice*, *learning* and the nature of the individual and collective spaces and ways in which aquatic hobbyists learn. Firstly, the emphasis on the individual is necessary here in order to foreground that whenever a hobbyist learns in a collective fashion, they might also naturally introduce knowledge and information gleaned through independent, that is - away from others – pursuits, as well as their own values and beliefs. Thus, as aquatic hobbyists represent informal learners who enact their hobby in a practical sense over the course of their day-to day lives, the practice of doing so can be understood as being reproduced within a specific social context complete with incumbent social rules and norms (Saunders 2000). Furthermore, in expanding upon Wenger's (1998, p. 45) notion of practice within communities of practice theory as 'meaning production', Saunders (2000) draws upon Giddens's early works in order to form a clearer definition of what it means to practice that comprises the socialised aspects inherent within

the individual . Consequently, the reason a more illuminated definition of practice is necessary, relates directly to aquatic hobbyists learning within their various community spaces – regardless of occurring on or offline. Thus, Saunders explains the knowledge within collective learning communities becomes 'locked in' resultant practices, rendering it as somewhat muted, implicit or tacit - as well as holding a normative value. This also holds further implications for knowledge to be conveyed as a discursive, or spoken communicative mode, and also non-discursively, through non-verbal communication. In ways slightly different to enacting ones' own will in forming a decision to communicate, that a practice can be understood, yet also lie within a concept so tacit that it defies the ability to be described must also be considered problematic. Consequently, by considering (i) the various routine and rule laden spaces of the vast social world in which the hobbyist - at both the individual and collective level - might learn, with (ii) the possibility of the hobbyist facing instances of discursive and non-discursive knowledge and information with (iii) the spaces that aquatic communities of practice are likely to inhabit such as offline and online community spaces, that influential power relations capable of producing distortive communicative effects might be held within the hybrid of hobby practices and learning can be introduced. Subsequently, a strong connection to the communities of practice literature – and not necessarily informal learning writ large - and the theoretical frameworks of Habermas and Foucault is now evident.

3.3. Situated learning: Communities of practice

A *community of practice* is a phrase used to represent a collective of people who share ideas through engaged participation (Lave & Wenger, 1991). Thus, regardless of the perceived space:

> "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly." (Wenger 2007).

CoP members have earned specific identifiers, which are useful to some degree with respect to understanding how overall group identity might be shaped by individual perceptions and attributions of knowledge-status. Thus, a *newcomer*, is precisely that, a seemingly

inexperienced member, or 'newbie' who recently joined. There are also the identities of the *master* or *old timer* to describe those perceived to have a greater level of knowledge and skills (Morrell-Scott, 2019). Gradually, newcomers, under the guidance of the masters or old timers, can change their status in relation to their own ongoing knowledge production - and at some time in the future - they can assume some responsibility for the learning of subsequent newcomers. Therefore, this effect, known as *legitimate peripheral participation* (LPP) (Lave & Wenger, 1991) is also an example of one of the manifestations of the aforementioned heutagogy (Hase & Kenyon, 2000) and also shares characteristics with the *Stoical* ways of Chapter 2. Therefore, in one form or other, learning within a CoP seems to have a purpose that centres around the contributory efforts of differently ranked members and also their propensity to guide others new to the scene. Despite the good intentions of these LPP labels, however, their critique has been around almost as long as the concept of CoP itself, (see Hay, 1993; Daniels, 1998 p.149) particularly when considering that member status arguably depends upon combined perceptions and attributions of all members. Thus, what is not made explicit through these terms are issues relating to (i) who determines these knowledge-roles and (ii) how to manage conflict arising through imbalances within established conditions. How these issues might relate to aquatic hobbyists will be outlined below.

3.3.1. Consensus and conflict within the aquatic community of practice

A general aquatic hobbyist is free to hold any extent of agreement with a particular belief as they wish, along with any associated allegiances to various aquatic tribes and identities. In terms of communication, beliefs are then distributed throughout the hobby-world to exist within an ongoing accumulation of aquatic information. Furthermore, considering the aforementioned potential for opposing beliefs to collide, the extent of consensus within aquatic hobby learning communities is similarly unstable. This can be understood though the hobbyist who specialises in either freshwater[3] *or* marine animals and plants, with either specialism demanding different understandings of applied water chemistry. Thus, the hobbyist who is comfortable with only freshwater related knowledge and practices cannot necessarily translate this knowledge directly into requirements for keeping marine animals.

[3] In terms of dissolved solids, the water composition of freshwater ponds, rivers and lakes differs to the marine (saltwater) conditions generally found in seas and oceans.

Therefore, within the same CoP, a member may have *master-type* freshwater knowledge but *newcomer-type* knowledge with respect to marine life. Consequently, the perceived knowledge-status of a community member is attached to specific units of knowledge and experience and therefore might not be a consistent status throughout the whole community nor secure an equal reception in another. Thus, the diverse nature of intra-aquatic hobby specialisms means that the attributions of knowledge labels might also be accountable for conflict. This scenario also foregrounds the willingness of a hobbyist to concede to lacking knowledge in one area, when they have an awareness that they are perceived to have a general knowledgeable status as the result of a separate knowledge area. Furthermore, a newcomer might not feel confident in challenging a master, nor understand the extent of their own knowledge limits.

In addition, the *legitimising* effects of group participation are arguably only legitimised from within (Davies, 2005). Consequently, to attribute the label of *newcomer* is relatively straightforward. That being *new* to a group and a perception of a *lower* degree of knowledge, however, might not, in every instance be the case. Additionally, to be accepted and perceived as a *master,* might be considered a more desirable position for a hobbyist to be in, however, to be accepted as a *master* arguably implies a lengthier process to earn this status; *master-status* assigned immediately upon joining also seems unrealistic. Furthermore, *master-status* is generally relative to the perceived expertise of other community members and consequently one that cannot indicate the degree of authentic knowledge formed within, nor prevent a newcomer from being or becoming *more* or *equal* to a master in a short space of time. Thus, upon perceiving the attribution of *master* status, this hobbyist may feel new pressures to retain this rank. Likewise, for a *master* in any community to undergo demotion to *newcomer* also seems illogical, considering that under normal circumstances an individual does not tend to *unknow* the knowledge that ultimately positioned them as a community expert. Similarly, a newcomer who never seems to progress their knowledge or express any indication of helping others, might also resist promotion. Additionally, considering that the attribution of master status might also attract positive benefits, and therefore, worth securing, should the *hobbyist as master* consider their perceived rank as more important than the reproduction of authentic truths, they may feel compelled to introduce strategic actions in order to uphold their position. Under

scrutiny of the wider subject matter of a CoP, the hobbyist may also fail to understand the extent or value of what they *do* know and therefore unwittingly contribute a distorted impression of their self, resulting in being too modest or too bold. Moreover, if the function of the knowledge attributions of LPP mean that all newcomers inevitably become experts or *masters* or *old timers*, collectives that fail to attract new members or have a slow rate of newcomers in relation to their progression to a higher rank, means that at some point the CoP might comprise individuals all of the same knowledge-status. This imbalance could, therefore, contribute to an absence of LPP, thereby forming a different type of *participatory dynamic* (Preece, 2004). LPP also raises questions relating to the *extent* of learning, with an implication that the realisation of becoming a *master* suggests that within that community, their learning is *completed*. Additionally, these concerns are not directly addressed by Lave & Wenger.

3.3.2. Communities of *recurring* practice

If the degree of learning within a CoP appears to have limits, the extent to which groups operate within the type of culture termed an *echo chamber* also deserves attention. Thus, an *echo chamber* in CoP terms would reflect a learning community whereby all members hold near-identical beliefs to form a specific consensus that remains fixed and resistant to modification or over time (Edwards, 2013; Wollebæk, Karlsen, Steen-Johnsen, & Enjolras, 2019). Thus, if a hobby community holds firm beliefs, they would also have a corresponding identity and a tendency to gravitate toward attracting new members who align with their principles. Furthermore, that echo chambers exist, also suggests that by their very definition, there is minimal tolerance for conflicting voices. Those who do not conform, therefore, would be made visible through the gaze of their opposing views, with newcomers wishing to continue their membership *without* conflict having limited choices. Consequently, within an echo chamber CoP, newcomers might (i) undergo a process of scrutiny by existing members that (ii) may not occur within a community that is accepting of individuals with varying views, leaving the newcomer with a choice to (iii) voluntarily leave the community, or be rejected through a lack of reconciled beliefs or (iv) become a community member through recognition or persuasion of the community's beliefs, or (v) as an infiltrator who gives the impression of alignment, but for various reasons desires to nonetheless gain access.

Another explanation for concerns of limited learning might be explained through the nature of the echo chamber-CoP and Habermas' idea of thematization. Thus, as described immediately above, if the only hobbyists able to *become* a newcomer within a CoP are those with values and beliefs consistent with the CoP itself, the instances for new, progressive or amended information to enter the community would be correspondingly minimal. Subsequently, in the presence of newcomers with opposing values, the existing echo chamber members would initiate *some* thematization, but arguably in a reduced and less sophisticated way as it would only be required to *reaffirm* the overall position of the community, as opposed to transforming the beliefs within it. This assertion also aligns with Foucault's *governmentality* in terms of bypassing particular forms of reflection in favour of interpretation by proxy. Consequently, reduced or non-thematization unfolds as a result of the recirculation of beliefs being sufficiently entrenched to both over-rule the ability for new information to (i) enter a group for the purpose of debate and (ii) subsequently deny individual and shared lifeworlds to amend existing perspectives, based on potential illuminations held within new sources. Therefore, using Habermas' approach demonstrates how low levels of learning might occur in CoPs as a result of *too much* agreement. Thus, firmly held values and beliefs are able to remain dominant for long periods of time. This scenario also demonstrates that along with *too much* thematization being a cause for concern, the possible influence of *too little* reflection might also be problematic in terms of *how* to challenge dominant beliefs. In addition, the knowledges that persist within the aquatic hobby are also able to be problematised in terms of the idea of reduced thematization. This is supported by another aquatic journalist, who writes:

> "My concern with the industry is that there are still lots of people out there pushing advice and fishkeeping practices that I was introduced to when I started fish keeping in 1989! For some, it seems the only thing that's been updated is the equipment we use while ethics have stalled." (Practical Fishkeeping News, 2018)

Here, the tensions between older types of potential cannonised knowledge (Nissen, Magidson, Gross & Bergstrom, 2016) and the practices this might influence are also foregrounded. Consequently, the knowledge held within printed books might be

considered as a type of echo chamber, particularly when considering the ability for their information to resist amendment through edits until a subsequent edition is sanctioned. If a new edition is produced, questions arise around who endorsed this, and the quality of information used for its justification. Furthermore, there is the additional perspective that as technological advances continue, poor aquatic practises and unscrupulous beliefs remain unenlightened. Therefore, this aligns with the tendency for some aspects of social life to remain resistant to swift and complete thematization. This thesis will now move on to matters related to learning within online communities, followed by critical discussion of the implications for assigning distinctions between the online and offline space.

3.4. The *offline* versus the *online* communicative space

In ways different to passively consuming a television programme or interacting on a telephone, the *World Wide Web* seems to have earned a generalisation as a *place to be* (Eklund, 2015; Lin, Su & Potenza, 2018). Regardless of the learning space, however, it is important to remember that hobbyists learning through digitised technologies are still processing and interpreting the *meaning* of information just as they would in offline realms (Baym, 2015). Therefore, while the ubiquitous and immersive communicative nature of online worlds cannot be ignored, digital technology is only one aspect of a communicative mode that humans must negotiate for learning.

3.4.1. The *offline* and *online* communicative self

The online/offline dichotomy might initially present as an inert assumption. Moreover, the divide is not a new realisation, with literature discussing this effect as early as the turn of the 21st Century (Suler, 2000). Thus, Suler explains how the divide might be overcome by individuals "telling online companions about one's offline life," along with "bringing online behavior offline" and vice-versa. The premise here is individuals experimenting with personal development through harnessing the affordances of each space, working toward integrating both spaces to avoid living in 'two isolated worlds.' Thus, this early historical assertion not only declares that the two spaces are capable of producing distinct behaviours, but that manipulations to self-expression - as a result of these affordances - seem welcomed. Consequently, that these defining terms still exist some 20 years later, however, also implies that corresponding perceptions of distinctions *between* online and offline representations still

hold meaning. Thus, it is important to explore these distinctions in order to determine their perceived effects within hobby learning environments, including how hobbyists understand their own and their peers' ability to hold consistent presentations of their *self* across all their learning spaces.

Participation in forums or social media websites generally means an absence of interpretive visual or audio cues compared with communication in the offline space. Thus, Agarwal, Gupta & Kraut (2008) maintain that face-to-face exchanges allow individuals to perceive body language, which is seen as important when attempting to evaluate levels of trust. Furthermore, psychological theories would also suggest that human beings have an inherent predisposition to detect threats (Wollebæk Karlsen, Steen-Johnsen & Enjolras, 2019) and therefore a lack of communicative cues to foster trustworthiness might cause disengagement from online communities *or* produce a tendency to take information and peers' intentions as genuine. Equally, the *presence* or *absence* of any manner of cues in physical settings might pose similar problems depending upon their perception and attribution. Therefore, distortions or concealment in either space might translate into learning based on fragmented, dishonest or absent information.

As introduced above, that online/offline distinctions exist at all might offer insights into how communicative distortions might unfold in online spaces. Thus, Castells (2001) suggests that 'the online space is not a space of its own', and rather than the internet creating new social distinctions, the effects manifested within online spaces, are merely an extension of the self. Moreover, Slater (2002) suggests the *virtuality* afforded by the internet is a social property, not an inherent quality of everyday life, complicating their implications further. Additionally, Williams (2006) suggests that deeper understandings of social life cannot be realised unless attempts are made to diminish the demarcations between online and offline contexts. Furthermore, Lin, Su & Potenza (2018) state that the integration of these perceived spaces is 'far from well recognised by the academic community and warrants additional theoretical consideration'. Consequently, these perspectives support the assertion that the online/offline divide remains poorly understood.

In addition, the well-established literature base that positions the *social self* in constant conflict (see Mead, 1934; Goffman, 1956; Freud, 2000; Erikson, 1982; Jung, 2002 & Laing, 2010), and the more recent descriptor, the *quantified self* (Beer, 2017) implies that the effects of a conflicted self in the physical space would enact with a corresponding inconsistent agency within the online - arguably destabilising any attempts at confident behavioural predictions.

The online space has also produced distinct behaviours that appear to demonstrate ways in which the individual might be afforded opportunities to exhibit behaviours that might be inhibited or unavailable in offline settings. Thus, the act of *flaming* (Baym, 2015, p.64), that is the use of swearing, insults or hate speech, is generally understood as both a widespread and hostile act attributable to online spaces (Walther, 1994; Hardaker, 2010). Additionally, a longitudinal study (Cheng, Bernstein, Danescu-Niculescu-Mizil, & Leskovec, 2017) suggests negative effects on mood and emotions within online spaces can influence 'ordinary' individuals to exhibit and perpetuate undesirable anti-social behaviours, known as *trolling*. This assertion suggests that, in specific conditions, any one of us might push the boundaries of acceptable behaviours further in online spaces - where the threat of accountability seems less urgent - than within offline communication. Furthermore, the ability for individuals to detect deception in *any* space is dependent on various factors related to the type of interactions and context in which it unfolds (Sip, Roepstorff, McGregor & Frith, 2008), adding further to the complexities associated with assurances of self-consistency in either space. Consequently, the assumption that the self is able to (i) maintain protection against the on-going influences of others to (ii) resist the appeal of purposefully misrepresenting information or beliefs or (ii) inadvertently respond to the actions of others to produce communicative distortions in any space cannot be assumed. Additionally, excusing or ignoring duplicitous behaviour, regardless of the setting, risks the acceptance and embedding of any distortions within that environment to become normalised. Therefore, unauthentic representations of the self can also produce an unauthentic learning environment. There is also the methodological problem of gathering information on the subject of *dishonesty*, as by its nature, disingenuous individuals can also control the extent to which they lie or tell the truth. With respect to Foucault's *the care of the self,* individuals may not be able to distinguish their own truths from those generated through their internalisation of social norms. Subsequently, despite this type of information being

problematic to examine completely, that the individual might adopt strategic actions to purposefully or otherwise distort their self remains highly significant to this project.

3.4.2. Motivational factors in online CoP spaces

Chapter 1 introduced motivational factors as either intrinsic or extrinsic, with neither one necessarily indicative of positive nor negative effects as a result of their ever-changeable subjective desirability (Kuvaas, Buch, Weibel, Dysvik & Nerstad, 2017). Examples of such factors include, *social capital*, *identity*, *belonging, trust* and the *perception of reciprocity* (Greer, 2012, p.14). Other factors related to successful online informal learning include individual *cognition*, *perceived status* and *standing* within the group, *enjoyment* and *value* of communications and *interpersonal interactions* (Liang, Liu & Wu, 2008). *Enthusiasm* has also been examined, as outlined in an ethnographic study of map-maker hobbyists, (Duggan, 2018). Additionally, in terms of the longevity and perceived *value* of online communities, this is unsurprisingly dependent on the participation of its members and the extent to which they are motivated to maintain their interest and contributions (Chen, 2007; Fang & Chiu, 2010).

Technology is implicated as an influence and is arguably only as good as its ability to function within its necessitated context (Wright & Parchoma, 2011). Badly designed or loosely moderated websites, non-user friendly, incompatible interfaces and connectivity issues can also derail good intentions of any online community (Ransbotham & Kane, 2011). High turnover of members can subsequently occur as they lose confidence in a space that produce little incentive to return. Previous studies also identified 'cyber ghost towns' (Preece, 2001; Phang, Kankanhalli & Sabherwal, 2009) to describe those online communities that fail to maintain an active membership, however, the reasons for this phenomenon are not described.

3.4.3. Online manipulations of language

As embraced by Habermas, language is a definitive example of a social code with the ability to permit, exclude and distort meaningful communication and action. This capability is foregrounded further when considering that the power and effect of language within online environments is directly limited by the ability of humans *and* technology to interpret and understand written, spoken or encoded information (Fairclough, 2015 p.200). In addition to the overt, instrumental influences on communication, distortions might also occur through

perceived mood, tone and linguistics of the communicative act, such as spelling, punctuation, grammar and emoji symbols (Baym, 2015 p.67-68).

3.4.4. Social media platforms and the perception of freedom

Along with research that reflects the global growth in digitised affordances (Global Digital Report, 2018), the educational literature unsurprisingly echoes a similar digital allegiance, with abundant research focusing on a wide-range of web-based educational social media engagement (Nortvig, Petersen & Hattesen, 2018). Additionally, recent impact analysis also positions the idea that the use of social media is 'democratic' and 'liberating' (Global Social Media Impact Study, 2015), further suggesting that learning through social media is linked to individual and collective empowerment. As introduced Chapter 1, social media platforms are free at the point of use and therefore an attractive option for hobbyists when considering available learning spaces. Moreover, motion picture platforms, such as YouTube, are attractive to hobbyists and offer a diverse range of educational videos uploaded by general citizens, celebrities and State institutions. Furthermore, hobbyists who use search engines for specific hobby enquiries, are often directed to established social media groups and posts, further promoting their presence. The economically neutral form of social media platforms, however - whilst offering hobbyists economic freedoms - can also be positioned as somewhat interrupted by other entities not governed by a paywall. Consequently, representations of steering media are found online in the form of exposure to combinations of unsolicited, targeted and irrelevant messages communicated by obligatory and generally inescapable interactions with advertisements (Beer, 2019; Zuboff, 2019).

The Foucauldian perspective would emphasise that targeting individuals for capitalist purposes or *surveillance capital,* (Zuboff, 2019) serves as a governing force, primarily through the indistinct ways that analytics are gathered, and the creation of a culture centred upon commercial conveniences (Beer, 2007). Therefore, arrangements of this form of power can produce forms of knowledge and beliefs through repeated and frequent broadcasting of biased messages by (i) distracting the hobbyist and subsequently (ii) introducing distortive effects into the lifeworld and (iii) contributing to the reproduction of social norms through mechanisms of familiarity and creation of need.

Influential social media figures are keen to strengthen their own attributes of emancipation further. One example, demonstrated by Kevin Allocca, YouTube's Head of Culture and Trends, makes the powerful rallying call:

> "The emerging media of today is, in some ways, more akin to the culture that existed before any of us were born – prior to the Industrial Revolution and the advent of mass media – when creativity was expressed through folk art that reflected the distinct realities, passions, and fears of the common people, not a small elite group. Today's technology once again allows individuals to shape our popular art and entertainment, and this time, they – we – can do it on a massive scale." (Allocca, 2018, p.xii)

Allocca asserts that it is through the combination of collective human behaviours and digital interaction that an exciting and new type of democratic movement can start to take place. This is also echoed in his language choices, referring to radical and socially divisive concepts such as *revolution* and *elite* respectively. Furthermore, his 'existed before any of us were born' assertion could be understood as an easy way to force a pre-interpreted view of an historical state of affairs - that if taken at face value - circumvents the need for further scrutiny. The use of the word 'us' also holds an inclusive feel, whilst he declares that 21st Century media formats are able to produce the same egalitarian effects as those that existed before the invention of the very digitised technologies that he claims enable his emancipatory effect. Furthermore, harking back to a perceived whimsical time - before the introduction of the printing press - seems nonsensical coming from a spokesperson for a prominent social media website, which in turn is owned by one of the largest multinational technology companies in the world. In critical terms, this liberating potential is diluted further by Allocca positioning his longing for a time *before* the introduction of mass media, presumably without actually losing any of the contemporary benefits his career and status depend on. Considering the comparison that YouTube's global reach extends beyond that of singular cultural representations of mass media, highlights the contradictory *hyperrealistic* (see Baudrillard, 1988) nature of the statement, further echoes criticism levelled at the incongruity of the contemporary communicative landscape.

In addition, this paradoxical statement also arguably glosses over any social injustices of the time, with the statement: “prior to the Industrial Revolution” open to criticisms of the Foucauldian notion of *historical reductionism* that this period of history was somehow idyllic. (Foucault, 1991, p.209). Moreover, even if that epoch was to be celebrated for any positive characteristics, Foucault’s *universalising dissolution* (Foucault, 1980, p.136) would also urge the hobbyist to question if those same features could exist now and if so, to whom would they serve best. Furthermore, the final portion of Allocca’s missive bears particular relevance to hobbyists learning to progress their knowledge for self-emancipation. The phrase “can do it on a massive scale” arguably might only produce future online content reflective of dominant, majority voices. Therefore, at the macro-level, positioning engagement with social media websites to exist as a positive contributing factor for widespread social equality becomes problematic when considering the extent that such hobbyist groups are able to function in a democratic or emancipatory way *within* them. Furthermore, the Global Media Impact Study (2015) state that social media is responsible for: ‘reinforcing traditional systems of power, social hierarchy, social and economic inequality and exacerbating political conflicts.’ Therefore, if informal education practices include an aspect of social media use, it follows that the ‘traditional systems of power’ already established in physical spaces, have effectively made a shift to online worlds.

Additional criticisms also position the fundamental algorithmic format of computers as wholly insufficient to produce judgements equal to that of the human, along with the accusation that *search* has become a new ‘techno-cultural code’ (Lovink, 2014, p.146) that replaces elements of *learning* with more superficial processes such as *retrieval*, with search engine responses governed by distortions such as popularity and monetized rankings. Furthermore, it is reported that some social media websites (BBC News, 2020) have recently introduced mechanisms through which *they* might alert the user to fake, manipulated or unethical types of information which although encouraging, arguably only shifts the gaze of arbitration to belong to agents of social media.

3.4.5. The peculiarities of the digital age

Assuming an allegiance with either side of the debate concerning the affordances of social media would fail to be particularly useful for this thesis, considering that the online space is

here to stay, and hobbyists undoubtedly use it. What is useful, however, is understanding some of the distinct differences between online and offline spaces and any resultant disruption to communicative acts. Thus, there are various social *quirks* that do seem solely attributable to the digital age (see Beer, 2019). *Lurking* (Baym, 2015, p.97) is one such activity that enacts differently within the online social space compared to the offline and relates to affordances of visibility. Additionally, Hansen, Ackerman, Resnick & Munson, (2007) assert that lurking is the most common role within online communities, outcompeting the act of *contribution* to the space by some margin. Crawford (2011), however, positions *lurking* in the online space as equal to *listening* in the offline space and when framed in this way might explain how seemingly content-rich online spaces succumb to an attribution of a 'cyber ghost town (Preece, 2001; Phang, Kankanhalli & Sabherwal, 2009). Therefore, that individuals wish to lurk or *listen* stands in contrast to the outward perception of a thriving participatory online community.

Facebook groups can authorise the function of various positively framed badges (Facebook, 2018) that indicate a *type* of member identity, such as *visual storyteller or conversation starter*. These labels assume *some* degree of symmetry in that none of them are negative in nature, nor does one seemingly quantitatively outrank the other in terms of group standing. Therefore, these monikers align with LPP, however, they are decided in the absence of human interpretation through algorithmic analytics and therefore imposed upon the individual in ways different to the mechanism of LPP within physical groups. Furthermore, this labelling would not occur in this way within the physical space, considering a scenario where aquatic club members undergo a process of review by unknown entities, resulting in being credited with a badge to wear each meeting night so that others might have an indication of their participation, seems a somewhat unusual prospect. Within online spaces, however, it seems accepted that this type of labelling occurs. Therefore, in the online space, these badges have the ability to function as a highly visible *normalising gaze*. Moreover, this type of gaze introduces a different level of interpretative outcome or may remove the need for interpretation entirely. As the participants in this project may belong to both the online and offline spaces of Facebook *and* the meeting space, there is also the consideration that labels formulated online, can influence perceptions in the offline space. Consequently, perceptions and attributions of individual status within some online CoP

spaces seem to enable identities to (i) exist and be permanently visible - in contrast to the physical space - where they arguably cannot occur in the same way and (ii) may create potential divisions as a result of this visibility that might not be as obvious in the physical space and (iii) as a known perception generated online, the label may potentially travel into the physical space should the two domains collide. The relationship between extrinsic motivating factors and strategic actions also remains valid here, particularly if the hobbyist wished to avoid a particular label or seek the attribution of a desirable one.

3.4.6. A reimagined axis of reach

Social media allows for communicative usage not only across a *vertical* axis of state to citizen, but also across a *horizontal* axis of reach that was once historically confined *within* social classes, as opposed to *between* (Baym, 2015, p.11). This shift in *how* information can now be digitally distributed arguably constructs an illusory impression of both open and reciprocal access. Thus, a tweet composed by a member of the public, which is then re-tweeted by a celebrity, illustrates a new type of communicative reach whereby members of the public can connect with individuals outside their normal social sphere. This interaction has positive potential for raising awareness of issues unable to reach the mainstream without celebrity endorsement but conversely, might also create distorted attributions of affiliation. That celebrities might endorse or support the causes of the everyday citizen, is supported by the concept of Habermas' communicative theory, in particular, that someone in a position of influence might join the everyday person in a particular social struggle. Regardless of social standing, Habermas would identify with people joining together to form allegiances in the presence of a shared cause and driven by authentic participation that at least attempts to counteract the effects of hierarchy and self-interests. There is also an echo of the parasitic mechanism of the effects of steering media. That the celebrity might be within the reach of the masses introduces an additional perspective to the *parasite vs host* account outlined in Chapter 2. Thus, that these types of celebrity-citizen encounters were present before the internet is not in question. Rather, it is the celebrity demonstrating a type of need for a seemingly voluntary and unforced relationship with the everyday person that is different. Conversely, Foucault would urge anyone suspicious of celebrity motivations to understand how matters of fame, perceived benevolence and selfless public acts of altruism might hold their own assigned form of invested power.

Finally, in terms of quirks, there are additional issues that centre around the constant emergence of cultural influences and their effects upon communication. These concerns relate to the rate at which academia is able to represent these in a timely way that preserves their immediate meaning, (Beer & Burrows, 2007). This is an effect also observed during the course of this project in relation to mainstream use of emergent communicative constructs such as *fake news* (BBC, 2020) and the surfacing of the *cancel culture* (Guardian, 2020).

3.5. Problematising informal learning contexts

The composition and nature of *context* in relation to educational arenas is generally understood as being important for its role in shaping the learning that takes place within it (Lave & Wenger, 1991; Trigwell & Prosser, 1991). Furthermore, if information is to be meaningful, it also needs to relate to a context (Kimble, 2013). Therefore, the reasons that context remains an issue at all centres around the seemingly arduous task of trying to capture all potential *polycontextual* elements, (Palojoki & Tuomi-Gröhn, 2003) with attempts to understand the entire structural components that might form the framework of social learning, when all individuals are free to learn across all areas of their lives, adding to the complexity. In addition, when the context of the *social world* could exist as the learning context, there may be an absence of indicators to demarcate the learning setting and therefore the visibility of factors that shape learning arguably becomes difficult, with *life* itself an additional option for consideration of context (Edwards, 2009). Consequently, this immediately poses problems in terms of the vastness of informal learning and may lead to the tendency to simplify any incidental effects. Furthermore, all communicative social learning experiences might also influence future participation in other contexts, dependent on perceptions formed through previous experiences. This serves as a reminder that learning spaces produce learning *and* associated behaviours, but as introduced above, the environment *and* context might also mediate learning behaviours across *all* encountered learning spaces. Ultimately, these problems risk obscuring the ability to discuss informal learning contexts at all with any degree of specificity that might refer to the conditions in which learning took place.

3.5.1. Environmental, contextual and cultural barriers

As humans learn in a variety of spaces, it seems reasonable that environmental norms also influence human emotional expression. Thus, influences on communication within the setting of a funeral parlour would unfold differently compared with that of a room above a pub. Furthermore, in the contemporary social world, CoPs can hold diverse representations of demographics, meaning that individuals from unfamiliar cultural heritages might learn together in any space. Learning experiences therefore might include language barriers or unfamiliar cultural signs and religious observations. Therefore, a hobbyist unfamiliar with certain cultural norms might act outside of expected communicative frameworks. Moreover, if an individual cannot understand the words of a different language, or they live with a sensory-limiting physical or psychological condition, then without assistance, undistorted communication arguably becomes challenging.

Context, however, might also be influenced by various other concrete and abstract characteristics (Edwards, 2009). Examples include the perception of others, sensitivity to extremes of temperature, light or noise, individual or group mood or physical well-being, or the subject matter itself - which can subsequently produce the tone of the learning context. Furthermore, these features might be palpable to a single individual or be immediately apparent, relevant and tangible to all. Likewise, they may never be realised on any conscious level for various reasons, including over-familiarity, obliviousness or individual differences, such as a physical or sensory disability or the inability to accurately judge the mood of others. Each of these examples could therefore render any of the contextually available sensory experiences as unable to enter the lifeworld. Therefore, if they fail to find their way in, there is arguably an absence of information necessary for thematization to occur.

The hobbyist learner, with no intention of gaining a formal qualification, is in many ways as free as their respective formal counterparts to access many identical social resources, including open access online information, libraries, books, individuals, clubs, societies and academic journals. What may not be equal however, is communication to explicitly indicate their availability. These barriers, however, arguably exist as being present in all learning spaces and applicable to both formal and informal learners, with the degree of awareness of

their agency dependent on various other social factors. Economic constraints might also exist for all learners in terms of the financial freedom to purchase resources. Likewise, as all learners are free to transition between the contexts of both formal and informal learning contexts, they are also similarly free to shift between learner types. Therefore, it follows that the point at which the individual transitions between applications of knowledge for formal or informal purpose is correspondingly difficult to identify and capture.

3.5.2. Threshold concepts: Effects of the gaze within the liminal space

Threshold concepts account for recognition of a *knowledge deficiency* and the subsequent journey of enlightened discovery to new explanations or understandings (Meyer & Land, 2003; 2005). The existence of threshold concepts in formal education, however, as described by Ashwin, (2012, p.102) introduces questions as to the function of knowledge disciplines as discourses that also hold the power to produce conditions for complexity - and therefore, the threshold concept itself - *and* the limits for its closure. Considering that Bernstein (as cited in Ashwin, 2012, p.91) talks of formal domains governing the 'who may transmit what to whom and under what conditions?' within formal domains, the answer to his question, therefore, lies somewhere in the combined effects of a standardised curriculum and pre-established academic disciplines. Furthermore, these disciplines produce conditions that involve various determinants for the extent of achievement, mediated by various assessment tools. Therefore, considering that hobbyists are also able to recognise and negotiate troublesome learning thresholds, introduces the issue of who might act as the *determiner* of achievement within the hobbyists' learning space. Furthermore, there is a suggestion that the beliefs produced through negotiating a threshold concept also involve an emotive element that might render them resistant to being unlearned or transformed further (Perkins, 2006). Therefore, threshold concepts, whilst seemingly important in terms of tackling the challenging aspects of a particular problem, might also contribute to the formation and distribution of immutable beliefs.

3.6. Knowledge and communication: *Ontological* matters of *epistemology*

Knowledge formation can be positioned as belonging to two distinct philosophical paradigms. Additionally, each viewpoint relates to the understanding of how *meaning* might be found and also the corresponding degree of interpretation that might be required

(Kimble, 2013). Subsequently, these philosophical and at times, metaphysical concerns are reflected within the general unease between the empirical origins of *positivist* viewpoints and the experiential or phenomenological accounts of the *interpretivist*s (Klenke, 2008 as cited in Salvin-Baden & Howell Major, 2013, p.3). Thus, a realist or *positivist* ontology asserts that reality is universally fixed and only knowable through direct reasoning of the products of the physical sciences, which in turn can be repeatedly shown to act consistently in defined conditions over time (Salvin-Baden & Howell Major, 2013, p.4). Additionally, categorisations of knowledge as *facts,* suggests a minimum, if any, interpretation, based upon the assumption that interpretations by proxy are sufficient (Rooney, 1992). The positivist view would also support that social practices such as learning are not always restricted to sensory experiences; they can also exist purely as the application of theoretical logic and reasoning (Kimble, 2013). Therefore, suppositions that form *factual* information may infrequently or never undergo empirical rigour. Conversely, the positivist concept of knowledge is contested by the *constructionist* perspective to position humans, environments and associated information encounters to be ever-changing and therefore always contextually dependent. Subsequently, this *anti-realist* (Chalmers, 2009) or *social constructionist* (Berger & Luckmann, 1966, as cited in Kimble, 2013,) view would assume that a communicated message or action has no ability to hold fixed meanings beyond collective perceptions and assumptions of those humans that also share corresponding epistemic beliefs. Categorisations of *epistemic* (facts) or *non-epistemic* (interpretations) knowledge, therefore, become problematic when considering that *epistemic* knowledge itself, is a product of combinations of empirical facts *and* the contextual influences of where it was produced (Rooney 1992). This suspicion, however, is not new (see Quine, 1953; Kuhn, 1962; Lakatos, 1976) therefore, that dimensions of knowledge might be quantified as consistent across settings seems a futile endeavour considering that *knowing* is always intertwined with the subjectivities of the individual *doing* the knowing. Consequently, the constructionist approach would also assume that the human organises *all* encountered information in relation to permutations of pre-existing interpretations of past experiences, *regardless* of their categorised existence as *empirical*, *factual*, *theoretical* or *interpreted* (Patton, 1990, p.434).

3.7. Distributed knowledge

The concept of *distributed knowledge* is one that also applies to learning collectives. Thus, the term defines a *collective* quantity of knowledge associated with a distribution across a specific community of likeminded people such as hobbyists as opposed to 'publicly known' knowledge (Thimm, 2014). Thus, *distributed knowledge*, suggests that when groups of people, such as hobbyists come together with common goals, specific challenges are overcome by accessing aggregate group knowledge. Furthermore, formation of this 'group belief' can defy vast geographical, cultural and temporal differences, to represent a combined knowledge that is potentially rich and highly useful in nature, despite not *belonging* in the same ways to all individuals (Ågotnes T. & Wáng, 2020). Outwardly, the concept of distributed knowledge appears beneficial, however close analysis of the modes and situations in which it functions highlight several problems. Firstly, if knowledge can be built within communal groups, distortions introduced through the passing of time mean it can also be 'un-built' with disastrous consequences to life (Kazmer, Lustria, Cortese, Burnett, Kim, Ma & Frost, 2014) and whilst the explanation of negotiating a threshold concept suggests that beliefs can become resistant to being *unlearned*, any beliefs are only as visible as the individual or group's ability or desire to make them known. Thus, knowledge can be lost, hidden or purposefully or inadvertently replaced, particularly when factoring in the effects of differences in space, culture, time zone and the passing of time in general. In terms of group beliefs and the *hive mind* (Gallotti & Huebner, 2017) the concept of distributed knowledge within a CoP also aligns with the idea of the echo chamber. Distributed knowledge may also add further communicative influences considering that the individual hobbyist who holds a partial account of a particular concept, may inadvertently introduce various associated distortions through a lack of understanding of the broader picture.

3.8. Considerations on other theoretical social learning perspectives

Selecting an appropriate theoretical framework is an important but daunting consideration for the researcher, with any chosen theory arguably holding some deficits (Hammersley, 2012). Therefore, it is useful to consider other possible social theories that relate to learning to offer some analytical comparison. Thus, social exchange theory (Blau, 1964) and social cognitive theory (Bandura, 1986) are two prominent schools of thought that share alignment with contemporary informal learning environments. Social exchange theory

focuses on individuals forming mutual bonds, determined by calculated aspects of their own self-interests, that are reciprocally traded with others to produce meaningful results for both parties. Thus, social exchange theories conceptualise *power* and *influence* as produced by unreciprocated exchanges if breakdown in mutual exchanges occurs. The theory attracts criticism however in terms of its binary nature, meaning that beyond two individuals, the ability to identify the areas where power forces might emerge becomes increasingly challenging, as does framing all social activity as an exchange (Zafirovski, 2005). Furthermore, social exchange theory also relies heavily on the individualistically determined aspects of human nature and therefore cannot account for the concept of altruism, whereby individuals demonstrate behaviours generated by seemingly selfless motives (Honeycutt, 1981).

Similar theories (Levi-Strauss, 1969) attempt to account for a failure of exchange as related to abstract constructs such as *trust* and *values* and their subsequent ability to dilute discord produced through unfulfilled acts, based upon the premise that individuals will ultimately act in the best interests of the group and not their own. Exchange theories also attract criticism for being too reliant upon assumptions of a readily available cache of transactional social rewards and also fail to recognise the effect of psychological states such as emotion and mood within seemingly frictionless or beneficial social exchanges (Lawler & Thye, 1999). Furthermore, the mutual bonds created through exchanges, might only exist alongside a continuation of the conditions in which they were produced.

Bandura's social cognitive theory asserts that humans adapt and shape their behaviour in relation to their perceived ability to achieve successful outcomes, known as self-efficacy (Bandura, 1986). Whilst acknowledging that *ability* is a central to *doing,* and therefore relevant to hobbyists, the perception of one's own ability to be proficient at *something* can be assembled and disassembled as a result of many interpretations of social influences. Consequently, adopting reflective practices involves determining one's own skill level in terms of understanding ability and what might be needed to improve or develop. Problems arise however, when communicative distortions influence the extent of a realistic appraisal of one's own worth. Finally, as established so far, both Habermas and Foucault offer plentiful reasons for why a basis of fair exchange might not unfold.

3.9. Chapter summary

The associated theoretical and practical concerns outlined here offer a critical glimpse into how hobbyists' communicative distortions might unfold in ways that at first glance seem passive or inert through their routineness, familiarity and subsequent ability to be taken for granted. Furthermore, that emergent and novel aspects of aquatic hobbyists' learning spaces hold a sense of duality related to conflicts produced through both their desirability and complexity, adds further surety for the persistent presence of systematically distorted communicative acts. Consequently, having now outlined general, theoretical and literature-based justifications for this project's aims, the following chapter will continue with a detailed explanation of the methodology and methods.

Chapter 4 - Methodology

4.1. Chapter overview

This chapter aims to outline the ethnographic approach, followed by a detailed account of research design, settings, participants, the rationale for data collection methods and analysis. Additionally, in order to convey the nature of the research settings and my own identity as researcher, aquatic hobbyist *and* learner, the chapter includes brief but relevant personal details. The chapter concludes with comment on the ethical aspects that relate to undertaking yearlong multi-sited ethnographic research, along with issues of study validity and the extent that the findings might be generalisable.

4.2. Research paradigm

In undertaking ethnography, data collection can involve interpretation of quantitative data, however in a desire to position the participants and their narratives as central to this project, direct quantitative analysis is rejected, with the study undertaken within a qualitative paradigm, to sit within the social constructivist position (Salvin-Baden, & Howell Major, 2013, p.3). Subsequently, a qualitative ethnographic approach does not aim to offer an *apriorè* hypothesis. Subsequently, whilst this project is grounded within the aforementioned feasibility study, no predictive estimates of the *nature* of the findings are assumed. Therefore, the research questions were operationally designed to allow participant views – through wide-ranging interview questions - to cohesively relate to overall research aim (Trowler, 2012b).

4.2.1. The ethnographic researcher

The researcher's role in traditional ethnographic research involves prolonged exposure to a particular cultural group, with the aim of gathering detailed descriptive data through techniques of observation, note-taking, informal conversation and interviews (Cousins, 2009, p.109). The ethnographer's purpose being to gain insights by learning from those who experience and shape the defining characteristics of the group as a whole (Agar, 1986, as cited by Cousins, p.110). The ethnographer can be positioned as a mediator between two cultural divides, with elements of the unknown accepted as central to the rationale for pursuing any ethnographic enquiry (Agar, 1986, as cited by Cousins, 2009, p.110). In my

case, a *divide* was foregrounded through my inexperience as a member of the aquatic club and I was reminded of constructive comments offered to me in Part 1 of this programme that seem to still hold resonance. These comments allowed me to question the legitimacy of undertaking research within the aquatic community in terms of intended audience and the degree to which the setting might offer academia useful comment. Therefore, I aimed to keep these questions foregrounded as I embarked on this new project.

Ethnography also aims to bridge the gap between discrete communities to elicit deeper understandings of more under-represented views, thereby helping to introduce unheard voices into the mainstream. Furthermore, ethnography requires the presence of Malinowski's *foreshadowed problem*, (Hammersley & Atkinson, 1983, as cited in Cousins, 2009, p.114) with the issues of *communicative distortions* a sufficient reflection of this. Additionally, the two divides here might be *myself* - as a representative of the academic community and my *participants and settings* - as representatives of the aquatic hobby. Consequently, I was of the mindset that the notion of a *divide* felt somewhat dramatic considering the aquatic group as a whole, including myself, were *all* representations of an aquatic community. The *divide* is somewhat useful, however, in helping maintain an investigative approach and served as a reminder to constantly look for areas that seemed curious or unfamiliar. Therefore, I repositioned the *divide* to represent *potential line of enquiry*. On the related matter of researcher positioning, awareness of a *divide* contributes to issues concerned with insider/outsider researchers and will therefore be addressed here later. Consequently, in line with an ethnographic approach, I acknowledged the need to uphold proactive strategies in order to naturally allow the setting and participants to reveal their insights, whilst also resisting the urge to manipulate events beyond what I might perceive to be their usual boundaries. Consequently, I used the first two meetings to try and get a feel of *usual boundaries*, with comment on related challenges detailed in following sections.

4.2.2. Linking ethnography study design to the research aim

The aim of this study is to answer the overarching question:

'What is the extent and effect of influential power relations within the communicative processes of hobbyists as agents of informal learning?

Therefore, in keeping with an ethnographic study design, it was crucial that the research questions captured a sense of *operarationalisation* (Trowler, 2012b). Put simply, the key aspects of the study, chiefly *hobbyist learning*, the *communication of information* and *influential forces* needed to lend themselves to being realised and subsequently described through both observational research methods and the chosen theoretical framework. Furthermore, in terms of my own position within this study and not least considering what felt at times to be the daunting prospect of focusing on both *communication* and *power*, I reflected many times upon maintaining my own symmetry conditions throughout this study, with these reflections also extending to the *purpose* of the research questions. I concluded, therefore, that in terms of the participants, research questions arguably hold more significance to the researcher in terms of existing as a fixed and highly accountable aspect of a doctorate thesis. Regardless of the participants ever needing to see the research questions, however, their *wording* must be designed to enable those key aspects that will form their response to be not only visible within both mine and the participants' observations and narratives, but also remain relatable to *and* consistent with the wording used within the semi-structured interviews. Therefore, the research context and the boundaries of the terms used within the research questions as described in Chapter 1, along with the archived products of my observations within all ethnographic fields, I was satisfied that operationalism was achieved.

Using an ethnographic approach enabled me as the researcher to be exposed to the same surroundings as my participants, meaning that both the participants and I could experience much of the same environments and experiences at the same time. Furthermore, as effective ethnography should encompass as much exposure to participants' activity as possible my attendance at the club meetings seemed a logical starting point before the interview stages for reasons related to my lack of experience within a large aquatic hobbyist group. Therefore, I wanted to quickly understand how the group would enact in their social space and also how I might fit in, then I could start to evaluate who I might feel suitable for participation and also, I could begin reflection upon the types of questions I might want to

ask. Furthermore, simply asking questions in interviews *about* the aquatic society meetings – without my own involvement - would potentially offer less rich contextual information for me, compared to experiencing these meetings first-hand. I also dismissed carrying out a *netography* type study (see Hine, 2015; Boellstorff, Nardi, Pearce & Taylor, 2012), which would be limited purely to online communication, as I felt that exploring the types of communicative influences across hobbyists' online worlds might potentially restrict opportunities to foreground all possible understandings of the online/offline divide.

4.2.3. Cultural dilemmas

Willis identifies 'symbolic forms' (Willis, 2007, p.28) used by humans for expression and interaction, with one such form, *language and language paradigm* bearing some relevance here, particularly to Habermas' emphasis on shared language within communicative acts. Willis, however, claims that although language is crucial to humans making sense of their world, it is not enough to fully understand the *sensuousness* of cultural practices. Thus, some aspects of cultural practices, as a result of their structure and form, do not easily lend themselves to comparative analysis or crossing cultural divides. An example can be seen when considering how objects and artefacts might be understood in sensory terms within the world of aquatics. For example, fish, plants, aquaria, books, rocks and chemical testing kits are all largely distinct examples of aquatic related cultural artefacts. They are arguably straightforward to describe *within* the ethnographic field and lend themselves to various types of linguistic description that would arguably still lead the interpreter back to their primary form, achieved through culturally shared language. Consequently, Willis emphasises that analysis of different modes of cultural practices might be enhanced when undertaken alongside material objects in ways that help to produce commensurability through more tangible foundations (Willis, 2007, p. 28). Therefore, as a result of the perceived freedoms attributed to informal learning, along with the participatory nature of the aquatic hobby *and* the sensorially diverse practical and technical presentations within it, I felt it of value to attempt to understand the types of learning resources that hobbyists might choose when given reasonably emancipatory conditions in which to do so. Therefore, regardless of my own identity as an aquatic hobbyist, conducting a second interview to focus on participants' choice of learning object, artefact or photograph, aimed to add

further contextual depth to understanding the distortive communicative effects of hobbyists' communicative worlds.

4.2.4. The presentations of the defined ethnographic fields

The primary research site was considered to be the monthly aquatic society's meetings, held at the beginning of the month in the large upstairs space of a public house. In attempting to confront the problem of *context*, however, I was also interested in participants' experiences of using internet spaces. Consequently, in some respects, the use of the internet might also be considered to be part of the ethnographic field, however, there are reasons that I have not included representations of the aquatic society's Facebook group as primary data. These reasons relate to feelings that, even if anonymised, excerpts from online threads could be unduly and unethically revealing. Frustratingly, it is generally the seemingly contentious content that offers interesting lines of enquiry; however, I was acutely aware that despite constantly declaring and reaffirming my position as a researcher at the meetings, using Facebook material to demonstrate points of conflict would possibly undermine trust.

In many ways, the pressure I felt to manage these tensions produced by ethical ethnographic research *and* collecting data from all possible sources, felt further impeded by a form of *technical gaze* that served to mediate what could and could not be classed as data. In picturing a future scenario where if asked by a participant at a later date for a copy of my thesis, I could think of no grounds where not being obliging would be appropriate. Therefore, if I had included their Facebook posts written – albeit anonymised – that related to aspects of their interview or learning object, I would struggle to feel as if I had acted in a transparent and therefore, ethical manner. Thus, in order to work around this perceived deficit, I placed an emphasis on making sure I asked participants *about* their experiences in online aquatic spaces and also made sure to check the Facebook group in the days after a meeting to determine if any of my own concerns or critical lines of enquiry were echoed by other members. This technical gaze, however, as will be outlined in the final chapter, also held a productive function that allowed new topics - and therefore rich data - to be produced.

4.2.5. Experiencing the primary ethnographic field

This section will attempt to portray the ethnographic scene of the society meeting room, in order to offer important contextual detail (Emerson, Fretz & Shaw, 1995, p.67). Prior to the start of this project, my only interaction with the aquatic club was over a 4-year membership through the Facebook group. As a result, I did not gain any contextual information about the surroundings until I attended the first meeting. Subsequently, as this was a new experience for me and one that I was about to embark on alone, I was somewhat apprehensive before entering into the building for the first time. Going out on a cold, dark winter's evening in early January was not an activity I was used to and the 8pm start time also felt late. I was, however, excited to be starting my fieldwork, which made the doctoral process feel like it had moved into an exciting new phase. My partner, who had driven me to the venue sensed my apprehension and offered to come in with me, however, in the interests of me experiencing a full ethnographic experience, I decided that having someone with me might also impact on striking up necessary introductory conversations.

I knew that the meetings were held in a room above the pub and on entering the door, I saw a helpful chalkboard sign pointing to the stairs. The sign represented a cartoon illustration of a fish, with the word *club* and an *arrow* pointing up. I made a note of the universal prompt aimed at newcomers like myself and I thought this gave a welcoming impression, given that the pub itself had numerous external and internal doors and corridors that could feel intimidating. The stairs led up to a small landing with double doors that were propped open to reveal the meeting room itself. The function room immediately seemed suited to holding large groups of people and was reminiscent of the type of space typical in many U.K. public houses, and social clubs and I considered this room to be relatively generous in size. The room seemed to have a lingering, disinfectant type smell that was not entirely pleasant, however somewhere in my mind, I quickly reconciled this with the idea that the room had recently been cleaned. To the left of me I immediately saw a raised stage area where organisers were arranging what looked like various hobby (filter sponges, fish books and maintenance equipment) and non-hobby (chocolates, cans of beer and wine) related prizes on a table, along with another member assembling a projector screen. I could also spot various polystyrene boxes, which I presumed would contain livestock for the showing table and auction. I then realised the room was overly warm and wondered if this was pre-arranged so that the fish didn't cool down too much.

Immediately facing the stage was a staffed bar that members were already using to socialise, with the room having a hum of combined chatter that implied animated conversation, yet no clues were revealed as to what these conversations might comprise. The rest of the large space was filled with old fashioned circular Formica pub tables and their corresponding chairs, with some of the tables arranged in a 'C' shaped formation and others arranged in clusters, which seemed more conducive to social conversations. I then realised the tables in formation looked like they would at some point contain fish in tanks, as a member was busy setting up small show tanks and filling them with water from plastic jerry cans. Some areas of the room seemed very brightly lit, with the stage area and outer perimeters, less so. The room quickly filled up, and as a result, became even more noisy and hot. Despite my own apprehension at being there on my own, with the intention of somehow encouraging people I had never met before to engage with my research, I was heartened at the extent of the communication that was happening within an equally pleasing visually and sonically rich setting. I had a fleeting worry of *how* I might interview participants on this busy site, which I immediately shelved through a relief that I had not been confronted with the worst-case scenario of a poorly attended meeting, complete with untalkative or disinterested members. The aquatic meetings started at 8pm and generally assumed the structure of a planned presentation from around 8.15pm until 9pm, after which, members took a break to get refreshments and socialise, and at around 9.30pm the raffle would be drawn. After the raffle, an auction of aquatic animals and hobby paraphernalia would begin. Meetings generally finished at 11pm depending on the amount of auction items.

4.2.6. Considerations on the informal curricula of society meeting nights

Over the months, society meetings were characterised by a particular format, which could be understood as a type of 'informal learning curricula' that seemed to have been settled upon by the society as a whole. Thus, as outlined in the paragraph above, the structure comprised guest speakers each week, apart from the January meeting that was concerned with the society's annual general meeting. Throughout my attendance, these topics were as follows, keeping and breeding suckermouth catfish, an 'ask the expert' session that was later renamed 'ask the aquarist', a walk-through of the aquaria housed within a well-known zoo, a talk on ornamental shrimp, a practical session involving a demonstration of a new

society microscope, how to build an aquarium and a talk from a fish food representative, with the final guest lecture being advertised as being 'an exploration of the fish of Peru'.

In terms of the content of these talks, on one level, they were very enjoyable and informative. The talk on suckermouth catfish was interesting and I have kept various examples of this genus over the years. The speaker was highly engaged in his account of how he has bred some of the rarer species, however, at times he lost the room, with members slowly starting to converse between themselves. The subject was possibly too specific, and it was easy to understand that those with no interest in these fish might become distracted. The 'ask the aquarist' evening was a joy to experience, with this delight stemming mainly from one of the panel members who talked with passion and sensitivity about his fish keeping experiences, including an historical account of how he managed a prolonged power cut. Regardless of size, all aquaria require filtration to ensure the water that the fish live in is constantly passed over a colony of nitrifying bacteria that reside in media housed inside a filter unit – and to do this, a power source is needed. Thus, any power cut, planned or otherwise is generally one of the biggest challenges an aquatic enthusiast can face. Subsequently, the experienced aquatic's advice resonated some months later when I was given notice of a planned power cut that would last between 8-12 hours. I was able to shelve some of my anxieties, however, by now knowing that by purchasing a diesel generator, when the power cut came, I would be able to run my filters and heaters, needing only to forgo the lights, which in the grand scheme of keeping the bacteria in the filter – and the fish – alive, was a happy compromise.

The walkthrough of the behind the scenes areas of the zoological premises was again interesting but I would have liked to have seen close up photographs of fish, of which there were none and sometimes the focus of the talk seemed to be upon rather inconsequential aspects of the visuals such as explaining that 'this door led to this door' for example. The audience seemed genuinely engaged however, which may have had an association with the talk being delivered by one of the society's committee members. As a keeper of shrimp and other invertebrates, I was looking forward to the ornamental shrimp presentation. I did not learn anything particularly new, however, I appreciated seeing the wild habitats of where different species of shrimp might be found in areas around China and South-East Asia.

The practical session felt a different type of meeting and there was some acknowledged reluctance from members at having to get up and move around various tables. Consequently, this gave me the feeling that members preferred the curriculum of their meeting nights to continue as it always had, with the committee members doing their best to encourage members to mix outside of their perceived fixed social groups. The demonstration on how to build an aquarium from scratch was illuminating and members in my group were keen to help out when asked. Personally, I was very wary of the sharp edges of the cut glass but was surprised to learn how easy it was to construct a new tank with only a few basic materials. In rotating around the sessions, it was the microscope class that caused me some concern in terms of my own understanding of fish husbandry and anatomy. Thus, to explain, the society had recently purchased a microscope fitted with a camera that would be made available to members should they wish to use it. A situation where they might use it was then described which left me feeling that elements of this could have perhaps been clarified in order to reduce harm to fish. For example, fish are prone to various internal and external parasites and a selection of these are known to colonise the gill area. Much like the human lungs, the gills of a fish are fundamentally implicated in respiration by enabling gaseous exchange across their blood-rich membrane and as I understand it, they are very delicate tissues that must be treated with care. Therefore, in the demonstrator encouraging members to take 'scrapings' of their fishes' gills - if they suspected the presence of parasites - felt lacking in the specifics of precisely how to do this bearing in mind the care needed to catch a fish safely and keep it still long enough to take a sample of gill tissue whilst preserving its integrity and causing no harm. I was very close to asking a question but felt a little intimidated, mainly because none of the other members seemed to be picking up on my concerns. In the days after the meeting, several concerted checks also demonstrated an observed absence of any similar concerns from other society members within the Facebook group. I was, however, highly aware that in not tackling these types of anxieties might serve to act as a mechanism of normative social reproduction, which was outlined as problematic in the initial sections of Chapter 3. Furthermore, that other club members did not raise concerns could also exist as an effect of power, with their outward lack of concern bound within a deference to perceived authority figures to produce either a form of ready-made consensus or silence through intimidation. These issues therefore align with the Foucauldian idea of the gaze and the imperative to

speak and also highlight how regardless of the impression of an arena conducive to the ideal conditions for speech, the speech might not always follow.

Finally, the presentation on the 'fish of Peru' felt a little 'mis sold' once it began. This is because as the slides and narrative unfolded, it became obvious that the talk also acted as a thinly disguised promotional pitch aimed at those who might be interested in travelling to Peru to collect Corydoras catfish from the wild. The speaker was also wearing the branding of his company on his sweatshirt and cap, which added further to the corporate agenda. Although I enjoyed the photographs of the Peruvian rainforests and have kept fish in the past from this area of South America, I now consider myself the type of aquatic enthusiast who rejects the collection of wild fish aside from some very narrow tolerance of justification that would be related to ongoing preservation of the species through dedicated breeding programmes. Consequently, despite owning wild caught fish in the past – and I possibly do so now – I made a conscious decision around 2 years ago to only purchase captive breed specimens for my tanks. The thought of 'collector tourists' trawling through the untouched streams and river basins of the Peruvian Amazon is horrifying enough without the added ecological injustice of catching native fish and hauling them back to the U.K. in polythene bags and boxes. Additionally, the location in Peru was kept a secret and this fact was referred to numerous times. This made me reflect on deeper issues of humans colonising and attempting to 'own' portions of the natural world, a thought made even starker considering a white male from the U.K. considered he had sufficient power to assume the right to sovereignty over a place that arguably might not necessarily be owned by anyone. Consequently, the whole feel of this talk was one that felt very distant to my own moral viewpoint and although I would still have attended the meeting, I also felt a little cheated in terms of the way that the talk had been advertised. I was also reminded of a member sat on my table at the first meeting who talked about his own previous collecting trip to Uruguay. The member I was sat with at this talk, however, echoed my concerns but again, the feel around the room and the lack of concern posted in the Facebook group in the following days further supported the nature of this talk as being wholly acceptable. In ways similar to the issue of how to ask questions relating to ethically taking gill scrapings, I felt even less able to challenge my assumptions of the politics of nature when the time came for questions from the audience. I was uncomfortable in forcing the spotlight upon myself

through asking a controversial question that directly related to undermining the entire substance of the presentation itself.

Despite some of the negative reflections above, the society's informal learning 'curriculum', the evenings in general were interesting and engaging at both the level of social learning and the hobby itself. The enthusiasm of society members was obvious and inherently locked into the fact that they felt motivated to attend in the first place, along with the busy and well attended nature of the evenings themselves.

4.3. Recruitment and participants

In order to be as transparent as possible about my status, when approaching possible participants, I explained at the first available opportunity that I was a researcher. Therefore, at no point did I assume a covert stance, yet neither did I excessively announce my research status in any other way except through natural conversation. Thus, I was keen to avoid the impression that I was somehow in a socially elevated position and therefore, in ways that seem counter intuitive to recruitment, I maintained a reasonably low profile. Consequently, I explained my status as researcher/hobbyist to everyone I spoke to, despite my awareness that some society members might know this from incidental communications within the Facebook group. I also offered all the relevant study information in print form to any interested members. Furthermore, I had been in communication with the society's secretary prior to my first meeting and he was aware of the aims and objectives of my study, including seeing copies of my participant information/informed consent sheet.

Recruitment was carried out by approaching individuals at meetings, during those times when socialising was permitted through breaks in the structured activities. I decided against raising awareness through distributing leaflets or posting in the Facebook group as I felt this approach might feel somewhat detached from striking up a natural engagement with potential participants. Announcements also seem to produce formality and despite this project having its own formal requirements, I did not want to unduly create a formal feel. The *broadcast* tactic also felt similar to a *first come first served* approach and although more straightforward and easier to manage, it also felt at odds with attempting to gain some

assurances that participants would also commit to a second interview – thus, I was also clear in pointing this additional aspect out multiple times once a participant had signed up. In total, six participants took part in the study. This number was not fixed from the start but guided by the themes that emerged from the data as fieldwork unfolded. Therefore, the participants were chosen in a purposive manner, that is, participants held characteristics that demonstrated direct relevance to the research aim (Hayes, 1998, p.122). Thus, in undertaking some initial conversational enquiry I ensured I would be recruiting a sufficient representation of aquatic enthusiasts, each with varying levels of experience. Additionally, in adopting a *constant comparative technique* in terms of analysis (Strauss & Corbin, 1998, p.67), meant that once the fieldwork started, the acts of transcribing, analysis *and* interviewing participants occurred concurrently. Consequently, once thematic saturation followed, that is, a lack of new emerging themes (Strauss & Corbin, p.136) the data was felt to be sufficiently rich at recruitment of six individuals. Moreover, I had to be mindful that my study design involved participants undertaking two in-depth, semi-structured interviews and therefore care was taken not to generate too much data that the project risked becoming unmanageable or unethical through gathering participant data that might never be used.

Each participant was allocated a pseudonym in order to maintain anonymity whilst also avoiding the de-personalising act of attributing participants with a number. The pseudonyms were reasonably traditional in nature and therefore chosen to generally reflect the participants' gender. Consequently, for the purposes of this study the participants are *Jennifer*, *Craig*, *Peter*, *Sean*, *William* and *Nicola*. The participants had a range of aquatic experience – Nicola – was a relative newcomer to the hobby and had recently set up two home aquaria. Craig and Jennifer were a couple that lived together - with Craig having past experience with aquatics some years ago, with Jennifer being novice. Two other individuals identified as near-lifelong aquarists and had kept fish from young ages. One of these participants, Peter, had previously been the editor of a well-known and well-distributed aquatic print magazine, who now works in the manufacturing side of the aquatics industry. The other lifelong aquarist, Sean, was also a moderator for the same print magazine's forum, however, his time spent in this role was later than Peter's tenure. The sixth participant, William, had been keeping freshwater aquatic animals for around two and a half

years and was about to embark upon keeping marine fish, which would be a new venture for him. Participants' ages ranged 26-48 years. In terms of their salaried professions, participants self-identified as: social worker, local friendly handyman, marketing manager, senior healthcare assistant, seafarer/deck officer and insurance broker. Subsequently, these background characteristics help to frame their narratives as reflective of their both their past hobby experiences and the leisure time afforded by their career roles. Thus, despite the varied range of existing hobby activities and professions, an alternative selection of participants might produce correspondingly different accounts. That said, the participants describe attributes that seem to exist as congruous to a natural growth and development that is associated with hobby pursuits. For example, this cohort represents two types of newcomer and 2 veterans, along with someone who recently re-joined the hobby and another with relative experience in one area, about to embark on a new, unfamiliar project. Selecting participants with varied amounts of hobby experience, therefore, aimed to minimise the confines of attributing the findings to a particular type of hobbyist. For example, the findings from a study that only selected veteran enthusiasts would only hold relevance to other veterans, when veterans are arguably only one type of aquatic hobbyist. Therefore, whilst participants' career roles are outside of my control, participants' hobby characteristics were deliberately chosen to represent views grounded within a wide cross section of perspectives and experiences.

4.4. Data collection techniques

Despite best intentions, there were various personal and practical reasons for not attending all twelve aquatic society meetings throughout the year. Subsequently, I spent a total of 21 hours observing 7 meetings over an eleven-month timeframe (January to November 2017). I also had to ensure my involvement was accompanied by synchronous and asynchronous note taking so that I might produce diligent and accurate observations. There were times when taking notes in front of people felt appropriate, but there were also times, however, when notetaking did not feel suitable in the wider setting of the room and I became aware of an overwhelming sense of member *distancing* whilst scribbling down notes, particularly using a pencil and paper. After all, no one else was writing notes, therefore I was made visible through my own manifestation of the Foucauldian gaze. Whilst writing with a pencil would have been my preferred method of recording my observations, I soon realised that

my smartphone was my answer. Therefore, I switched to recording notes in my phone and enjoyed this unexpected mode of camouflage as I became invisible through the effect of the many other people in the room also using their phones. There were times, however, when I still felt a little anti-social tapping away on my screen, therefore, if I felt I had a lot to document, I made excuses to go to the bathroom and continued making notes there. Note taking also continued on the journey home as a passenger and again once home and if necessary, the following morning. I was eager to ensure that I captured the whole of the evening's experience in as much detail as possible while the memories were still fresh. I revisited the fieldnotes the following morning by typing them up into a structured account of the previous night, including a list of all objects, states and emotions that I experienced within the setting. Thus, my fieldnotes will be incorporated into the following chapter to add context and further meaning to the findings.

4.4.1. The challenge of a busy ethnographic field

As ethnography assumes a data collection technique that involves detailed description of all that is within a setting, this invariably involves reflections on the detail and meaningfulness of spontaneous conversations with group members. Thus, impromptu conversations did happen and are represented in the fieldnotes. The setting of that large and busy room, however, posed some challenges in terms of the quality of in-depth information I would be able to collect in terms of interviews. In addition to the loud and busy nature, the tightly structured nature of the meetings meant that it was near impossible to have thorough or extended dialogue with other members. The option of taking recruited members to one side of the room to interview them was also troublesome, as I was acutely aware of disrupting their own enjoyment of the night's activities. Furthermore, participants might not have felt comfortable being interviewed in plain sight, nor should I presume they would. Also, from experience, the chances that my audio recorder would pick up participants' voices clearly amidst the ambient noise was reasonably slim, along with my own views on the effect of the recording device in introducing its own perceived influences. Furthermore, in the scheduled break times, group members seemed to shoot off in various directions - keen to get refreshments, use the bathroom, or pop outside for a smoke. As this was also my main chance to socialise around the room to introduce myself and ultimately recruit members, I conceded I would not be able to achieve a sufficient depth of interaction with

participants by attempting to gather data through the hurried exchanges afforded by the narrow window of opportunities within the busy night's schedule. Therefore, I needed a rethink of the ethnographic field in which to hold my interviews. Consequently, after meeting 2 (February 2017) and feeling confident that I had a good idea of the nature of the meetings, I made the decision to (i) attempt to arrive at all future meetings much earlier to get a head start on my introductions and (ii) made the decision to hold the interview sessions away from the busy room. Hence, the ethnographic field was eventually extended to include the homes and workplace of both myself and the participants.

In terms of the interviewing stages, this posed some challenges that also made me reflect on the ethnographic study design, leaving my adapted approach open to criticism of me meddling with the classical, *purist* ethnographic *way* of holding unprompted interviews with participants, wherever that might unfold. On reflection, however, I do feel that I handled the balance of collecting sufficiently rich spontaneous data through making detailed fieldnotes relating to ad hoc conversations as described above.

4.5. Interview stages: Forming the interview questions

The interview questions were formed with the primary aim of realistically and effectively identifying the ways in which aquatic hobbyists negotiated a wide range of available learning contexts, knowledge sources, material entities and influential forces. They were also formulated to minimise the risk of approaching the data in a fixed or narrow way. Therefore, of equal importance was forming questions containing phrases such as 'to what extent…?' 'how might you…?' and 'what did you feel...?' to encourage participants' responses toward being descriptive and analytical, avoiding simply stating *yes* or *no*, or utterances of agreement.

It was important to allow participants' narratives and choice of learning object to surface naturally, as opposed to using presumptive phrasing that would potentially limit wide-ranging responses or lead participants to an answer that they perceive I might expect. This is important in matters of aquatics, as my own experiences as both an enthusiast and a researcher, support the earlier suspicion from the aquatic press, that certain narratives serve to reproduce various aquatic issues. For example, in the sensitive habitat of an

aquarium, where the bacteria that keep fish alive exist in direct correspondence to a relatively narrow tolerance of change, any new interruption to normal practices can have a varying degree of significance. It follows therefore, that losing captive fish to reasons other than old age, generally means that the hobbyist was at fault. Changing a particular practice, therefore, often has consequences. Similarly, there are times when a practice *has* to be changed, or it might be absent or forgotten about. Often, critical events that produce fish losses, whilst unequivocally ethically undesirable, can offer the hobbyist opportunity to reflect and build knowledge to avoid repeating similar mistakes in the future. Thus, if participants thought I was going to judge them, or that I represented a *perfect aquarist*, then instances of conversation about certain experiences might lay unspoken. Furthermore, if these cannot be aired, then the data would risk conforming to nothing more than existing aquatic norms, which, as already mentioned, do not always reflect progressive ideas. Therefore, I had a desire to allow participants to talk openly about their hobby experiences, whilst fostering a sense of conversational informality to maintain an approachable, non-judgemental stance.

4.5.1. In-depth semi structured interview process

The semi-structured, in-depth interview process consisted of two stages: an initial interview and a follow up around 6-8 weeks later. Initial interviews lasted between 79-156 minutes, with the second interviews ranging from 24-88 minutes in length. In total I gathered 14 hours 39 minutes of spoken narrative. At the beginning of the first interview, participants were again reminded that this was interview one of two. I was mindful of alleviating my own worries that securing a participant for only one of the interviews, whilst not absolutely vital, might detract from offering a comprehensive account as a whole.

Participants Craig and Jennifer - a co-habiting couple - invited me into their home for both sets of interviews. Sean also invited me to his home for interview 1, with interview 2 taking place over the phone after several unsuccessful attempts to use Skype and Facebook video messaging. The telephone interview was recorded in the same way as if carried out face to face but as Sean could not see the tape recorder, I made sure to emphasise three times that it would be recorded so I was sure he was happy to proceed. Therefore, his consent for interview 2 is held within the narrative, not a consent form. Peter invited me to his

workplace for both interviews, and both Nicola and William visited me at home for both their interviews, which took place in my study, complete with my own various aquatic animals. Therefore, all first and second interviews generally took place in the same surroundings, except for Sean as mentioned above. Likewise, Peter's second interview at his workplace meant that the interviews took place in slightly different settings. Interview 1 was held in a side room of his main building, where I had a clear view of a large marine aquarium through a window revealing the reception area. Peter's second interview was in a different building, in a staff room that although not busy, was used toward the end of the interview by two employees. I assumed that as Peter welcomed the workers with a warm smile and continued chatting to me, that he was comfortable with their presence. They politely asked if they would be disturbing us, to which Peter responded they would not be. Despite concerns that my participant's voice might not be as clear on the recording, the interview was coming to an end and I did not want to deny the workers their tea-break.

4.5.2. Participant interviews – stage one

The first stage of interviews was designed to get to know the participant. The interview guide was intended to be a comprehensive - but not exhaustive - reference for questions and I allowed participants to generally talk uninterrupted at all times. This often meant that I did not necessarily ask *all* questions on the guide to *all* participants, as picking up on various cues as conversation unfolded meant that I could unearth new areas of interest when they presented. I also reassured participants that there may be times when I could appear as if I was distracted, not listening, nor speaking. I explained these perceived lapses as vital in ensuring I could check my interview guide, make notes if necessary and also keep my own voice to a minimum so that they were not interrupted or talked over. I also explained that if I felt a topic to be of particular interest to the study - as opposed to general descriptive narrative - I might use encouraging non-verbal cues such as hand gestures and nods instead of my voice.

4.5.3. Participant interviews – stage two

I asked participants to attend the next interview with 'an object, artefact or photograph that in some way is related to your learning as an aquatic hobbyist – whatever you chose to bring will form the basis for our discussion'. The reason for the vague wording was purposeful so

that participants had as much freedom as possible in making their choices but similarly, that they did not feel drawn to any specific item in particular. I was acutely aware of my potential influence on participants' choices and wanted them to feel free to use their imagination. I also needed to offer them suitable exemplars whilst also outlining what might be considered challenging in terms of both the practicalities and ethics of certain choices. Thus, I explained that an *object* might be a non-human made entity such as an aquatic plant, natural substrate wood or rock. I defined an *artefact* as a man-made article, such as filter media, lighting, or a book, electronic document or even a link to a piece of information they thought relevant. Likewise, I also mentioned that they could bring in a photograph of a chosen object or artefact to represent something that they were not physically able to bring. This allowed for additional creative options, for example choosing a photograph of a book that might have gone out of print, a photograph of something they did not own or a screenshot of something they had found online - all providing they had permission to capture it. Similarly, a photograph would suffice if the object was of value or impractical to transport. The option of choosing a photograph of an object or artefact introduced an aspect of duality, with the photograph potentially being both a portrayal and example of an artefact or existing as an artefact portraying an object or a scene. For ethical reasons, I also advised that if participants decided that their object would be an aquatic animal, that they brought a photograph to represent this and not actual livestock.

In comparative terms, the participants chose a wide range of articles to represent their learning and my concern where I imagined a scenario where each participant brought the same object, thankfully was not realised. Thus, the objects were: a custom made document detailing a method of fishless cycling[4], a custom made aquarium light reflector unit, a fishkeeping book published in 1986, a high-specification international mail order water testing kit, an A4 colour print copy of a photograph of a laptop and a digital photograph of a domestic aquatic-related scene. Consequently, the second interviews differed from the first, primarily due to the chosen object guiding the focus and direction of questions.

4.6. Data analysis

[4] *Fishless* cycling is considered the ethical way to prepare the filter of a new aquarium. The process reduces harm to fish through eliminating exposure to harmful products of the nitrogen cycle which are unavoidable in immature filters. For various reasons, many new aquarists inadvertently carry out unethical *fish-in* cycles.

All interviews were audio-recorded and later uploaded to transcription software (ExpressScribe™). The software was used for foot pedal control only. Transcription happened as soon as possible after the interview so any early indicators for additional enquiry might be understood. All audio-recorded material was transcribed verbatim. Once transcribed, all audio recordings were permanently erased from the recorder, the software and my personal laptop. Line numbers were added to transcripts for reference purposes.

4.6.1. Confronting the data

Due to the amount of data I had collected - around 85,000 words to analyse and 19 representations of six learning objects - not all of the data's sub-themes will be able to be represented in the findings chapter, primarily due to issues of the word limit and an urgency for direct relevance to this project's aims. That said, *all* participant narrative was analysed. Subsequently, this process involved the principles of grounded theory analysis, using an inductive, constant comparative method (Strauss & Corbin, p.136). This process then leads to the conception of interpretive meaningful assumptions that are entirely grounded within the data (Hayes, 1988) and explained in more detail below.

4.6.2. Grounded Theory

As an analytical approach, grounded theory (see Glaser & Strauss, 1965; Charmaz, 1983) affords the researcher various interpretive freedoms – not, as the name suggests, to necessarily *produce* theory in a scientific sense. Thus, that the participant's narrative will be a standardised, objective account of *all* aquatic hobbyist reality is rejected. Furthermore, upon commencing a study, a *purist* grounded theory approach would generally assume no prior knowledge of the associated literature, however, in accepting this as challenging - not least on a practical level - this criterion was clarified later as not strictly necessary (Strauss & Corbin, 1998, p.48). Rather, the interpretivist affordances of grounded theory serve to position the researcher as a 'tool' for data generation in order to produce meanings that are directly grounded within the raw data. Hence, it is a structured, yet interactive and reciprocal process, with the data being essentially co-produced between researcher and participant. For example, using grounded theory as an analytical approach allowed me to demonstrate how my inferences from the participants produced findings that held a firm origin within their narratives. Furthermore, this technique also enabled a consistent

approach to be applied to all stages of analysis and also preserved data integrity as the process of synthesising themes both *within* and *between* the participants' narrative accounts progressed.

4.6.3. Constant comparative technique

The transcribing and analysis were undertaken in parallel with interviews so that the deductive and inductive aspects of the emergent data might inform the contextual direction of future interviews. This allowed for a *constant comparative technique*, (Hayes, 1998, p.261-2). For example, Jennifer talked at length about issues relating to *cliques* and *tribes* in her interview; therefore, I made a note to ask subsequent participants their thoughts on these constructs. This approach was also used when analysing fieldnotes. For example, one of the society evenings involved advocating a certain practice that I felt was risky; consequently, I made a note while typing up my fieldnotes to add this to the interview guide. Therefore, this technique enabled the data collection and analysis to be iterative in nature and also allowed for a potential range of participant views on one subject.

4.6.4. Open coding

Qualitative data analysis is an inductive and deductive process. Thus, the initial interpretation of the narrative known as *deduction* allows formation of preliminary inferences from the data, with *induction* reflecting the engagement of more creative processes when analysing (Strauss & Corbin, 1998, p.136). Thus, analysis began by carefully reading through the narratives word-by-word and line-by-line. Important occurrences such as a meaningful word, sentence or concept were clearly marked, along with an associated explanation of particular relevance stated in the margin. This can be seen from the following example from Jennifer:

> *I spend a lot of time Googling and on the internet, stuff like that and I like knowing the ins and outs and the whys and the wherefores and that relates to my job as well because I have to do a lot of research to keep up to date with the laws and things like that*. (Jennifer/1/26)

In order to begin the process of systematically organising the data into manageable themes and sub-themes, in reference to Jennifer's excerpt, I began highlighting key words and annotating my own thoughts. Thus, I wrote, *Google*, *likes online research, likes knowing deeper meanings, job-related research awareness/skills* and *mentions her job.* These initial words and phrases are classed as *open codes*. In turn they become the building blocks of eventual themes and subthemes (Strauss and Corbin, 1998, p.101). Methodically working through the transcripts in this way means these codes began to form the basis of more secure thematic-based categorical concepts.

4.6.5. Axial coding

After open coding, axial coding begins (Strauss and Corbin, 1998, p.123). This involved linking all the narrative together using the open codes to create categories to reflect the emergent ideas. Through meticulous organisation of the open codes, I could start to justify the creation of axial codes such as *search engines* (to reflect Jennifer's mention of Google), *modes of enquiry* (to account for her research activities) and *depth of research* (to represent the extent to which research is carried out). Therefore, this axial code or category can now start to form either a theme or sub-theme directly attributable to specific instances within the narrative. I know this because the axial coding directly links to the open coding, with the open coding linking directly to the line number in the raw data. This method was repeated throughout the whole of the transcript, and then subsequently for every participants' transcript.

4.6.6. Selective coding

The next stage is termed *selective coding* (Strauss and Corbin, 1998, p.143). This is the process whereby all the categories identified by the open and axial coding process can be comparatively related to each other, including discarding duplicated codes to form relevant themes and sub-themes. For example, taking the instance of *learning*, all the participants' perceptions of the ways in which they learn such as *online forums*, *reading old aquatic magazines* and *journal papers* was then further categorised into the sub-theme, *learning resources*. Eventually, *learning resources* was ascribed to exist as a sub-theme of one of the identified main themes: *learning*. Once again, this selective coding process was applied to all transcripts, with both interview one and two analysed in an identical way with all codes

from interview 1 and 2 treated as one complete data set. This whole process ensured the validity of the emerging ideas to attempt to minimise poorly established or non-existent conceptions being generated and mis-applied (Strauss & Corbin, 1998, p.159).

4.7. Considerations on validity

Validity as understood within the positivist paradigm - that is the ability to perpetually reproduce faithful iterations of phenomena under distinct conditions - is widely accepted as incompatible under the same terms within qualitative paradigms (Cousins, 2009 p.8). Furthermore, some aforementioned aspects relating to the complexities of human interpretation, generates additional questions relating to (i) the provenance of individual ideas and beliefs and (ii) the extent to which *facts* might exist alongside *norms* (Roderick, 1986, p.8-9). Additionally, in his 1965 Inaugural lecture, *Knowledge & Human Interests*, (Habermas, 1972) Habermas affirms the challenges concerned with human interpretation when they lie outside broadly accepted facts. Beyond such facts, he suggests, everything else *is* an interpretation – and while the associated challenges of this have already been well described in this thesis, these complications remain. Consequently, turning to methodological matters, the influential ontological and epistemological elements of interpretation by the qualitative researcher are as significant as they are welcomed. Consequently, my project, with predominantly myself at the helm, made space for the fostering of trustworthiness of both the study design - by adopting well established ethnographic principles - and the data - through triangulation with myself through pausing for reflection, *member checking* (Saldana, 2012, p.28) along with using guidance and support from my supervisor.

4.7.1. Researcher positioning: the *insider/outsider* researcher

Adopting the identity of the *insider* essentially means a researcher assumes investigatory lines of enquiry in a familiar setting (Merton, 1972). That a researcher can, however, switch between distinct roles of *outsider* or *insider* is open to scrutiny, (Trowler, 2012c) chiefly due to the complexities of human constancy and the extent to which presentations and enactments of the self are able to remain distinctly attached to either identity or enact independently. Therefore, the status of insider or outsider researcher seems so constantly fluid and dependent upon various obvious and subtle elements that either status arguably

cannot distinctly exist without the other. Thus, I now began to reflect on my new position in this project as a *different* type of insider/outsider researcher. I came to this conclusion while considering the differences in my previous research roles in formal educational settings, where the majority of people would *expect* my activity to be research-related, as indicated by my job title. In addition, it was also my experience that upon revealing my status of *research staff* within formal environments, research activity somehow became *endorsed* and generally unfolded regardless of the participant sample or topic under focus. In preparation for starting this project however, I became aware of a sense of nervousness rooted in anxieties that I was about to embark on a new kind of research journey in which I was (i) uncertain about the degree of conflict that resided within my identity as a *researcher*, *learner* and *hobbyist* and (ii) the prospect that I was now wholly self-reliant for the degree of success and completion of this study. In straightforward terms, beyond the support of my doctoral supervisor, this project was entirely built from the bottom up by myself. Gone was the classroom of students waiting for me to support them with a questionnaire or a staff focus group to conduct in an attempt to address a particular problem. Therefore, I was acutely aware of the need to initially just observe the setting whilst getting to know people, in an attempt to minimise the perception that I was an *outsider,* who was only interested in recruiting participants and collecting a few headline soundbites for some sort of executive summary. Consequently, it was important that potential participants and indeed all members I interacted with knew, as much as I could be, that I was equal parts researcher, learner *and* aquatic enthusiast.

Other conflicting issues I faced included how to maintain objectivity as a researcher and avoid letting the "tail wag the dog' (Cousins, 2012 p2.) as ultimately the distinction between my own suitability to be a participant and the potential participants was distinctly blurred. Therefore, I had to be careful that I did not introduce *too* much of myself into the interviews in an attempt to minimise both *myself* and *myself and the participant* combining to become one voice. I did not want to feel like I had effectively interviewed *myself*. Furthermore, by embracing a reflexive ethnographic stance (Salvin-Baden & Howell Major, 2013, p.78) meant that my reflections on the extent of my own objective stance - considering my own personal attributes, epistemology and ontology – felt at times an almost impossible expectation. As such, these methodological concerns are not new to ethnography and are described in

terms of the divide between the *emic* and the *etic*. The *emic* researcher would be positioned as a definite insider and the analytical interpretations would reflect this. Conversely, the *emit* researcher would hold a detached, outsider stance (Cousins, 2009, p112. In hypothetical terms, this would be much like the knowledge that a researcher with no knowledge of aquatics might hold. Ultimately, both assumed identities of the *outsider* or *insider* offer the researcher creative ways through which to engage their participants. From my experience of both perspectives, the outsider role opens up various introductory communicative conduits, for example, through expressing a genuine curiosity for the unknown. The unknown can, however, seem daunting and therefore present its own challenges. Likewise, the insider might also encounter the *unknown* within seemingly *known* domains but possess enough knowledge to contextually interrogate the attendant social phenomena to bring *something* new. This approach might offer a varying account in comparison to assuming enquiry based around little or no aquatic knowledge. Therefore, either identity holds advantages and disadvantages for the researcher, with awareness of either stance being a positive starting point for robust and successful research outputs.

Finally, it is worth reflecting on my own feelings immediately before attending the first meeting - as demonstrated through my fieldnotes- as the fluidity of the insider/outsider role becomes manifest: Thus, my fieldnotes from the January 2017 meeting detail:

> I was slightly nervous about making my way into the building on my own, as this was my first meeting and I had no idea of what to expect or where to sit or even what my role should be. Luckily, as I signed in, a member recognised my name from the Facebook group and invited me to sit with him at his table. I was introduced to his friends and we chatted about fish related things. (Author fieldnotes/January 2017/4)

Here, I exhibit anxieties surrounding my own apprehension at being an outsider, further characterised by an initial absence of any established notions of belonging once *inside*. On entering the room, however, the first steps to *belonging* begin within seconds as my name is recognised by a member from the Facebook group and I am welcomed as an aquatic enthusiast. Therefore, I can start to assume the role of the *insider* researcher, based upon my acceptance - through kinship - as an aquatic enthusiast.

4.7.2. Ethical considerations

This study was approved by the *Lancaster University Faculty of Arts and Social Sciences* ethics committee board. In considering the socio-educational foci of this project, the subject matter is therefore somewhat *less* sensitive in comparison to other projects I conducted, for example, within healthcare environments. That said, an awareness of possible ethical issues should always be prominent in the researcher's' mind when undertaking any project involving other humans or animals. Consequently, I remained alert to participants' emotional state and also checked they were comfortable with the time that had passed, especially if interviews became lengthy. Therefore, despite my own perception of this study being relatively low risk in terms of subject matter, my past experiences allowed me to conduct the interview stages in a safe and sensible way. Furthermore, as mentioned above, some of the interviews meant that my participants were interviewed in either their or my home. On the occasions I went to participants' homes or workplace, my partner took me and waited for me outside. On the occasions that participants came to my home, my parents kindly occupied the living room, while I conducted the interviews in private in my study.

There were other additional observations that I felt important to consider prior to commencement of the fieldwork. Firstly, I wanted to make participants feel sufficiently engaged to ensure they could commit to a second interview some weeks later, however it would have been insincere to constantly reinforce this, nor could I offer any incentive beyond a genuine appreciation of their engagement. I feel I struck the right balance here, demonstrated by all participants successfully attending for interview 2. As the fieldwork progressed, I was also keen to point out to those participants already recruited that I would not reveal their involvement to other members.

4.8. Presentational methodology

This section aims to offer clarification on the technical aspects of data management in terms of the format of the findings outlined in the subsequent chapter, including additional explanations on how faithful reproductions of participant narrative were upheld. Firstly, in order to demonstrate how the narrative from participants relates to the research aim, the organisation of the findings themselves will comprise sequential instances of exploratory

preamble that are interspersed with the particular participant narrative that illustrates the justification for formation of a response to the overall enquiry. Furthermore**,** at the end of each narrative excerpt there will be a key to signpost three reference points: (i) participant's name (ii) either a 1 or 2 to indicate the interview stage and (iii) the line number - that if required - would take the reader to the point within the transcript where the associated narrative starts. As all participant audio was transcribed verbatim, all presented narrative is correspondingly unabridged. This means that the excerpts might include instances that reflect emotion, such as laughter or expletives, and vocal utterances that represent interruptions or pauses to speech, including additional indicators to any relevant non-verbal acts. In addition, there are no edits to the order of words within an excerpt, nor has any excerpt undergone contraction. For obvious reasons - when mentioned by participants - no real names are published, neither are various specific learning contexts, that by the exposition of their name also felt too specific to reveal. Therefore, instead of a name, information will be presented that indicates the nature of that substituted person or setting, for example: (her partner), (other society member) or (Facebook group). Consequently, this approach aims to minimise disruptions to the flow of the narrative, whilst offering sufficient equivalent detail to retain both contextual meaning and anonymity. As seen already throughout this thesis, footnotes will continue to offer additional context to those inherent or technical matters of the hobby that require appropriate illumination.

4.9. Chapter summary

In outlining the rationale for the research paradigm and the methodological approaches, this chapter explained the conditions necessary for the procedural aspects that enabled the study to be achieved. Consequently, in demonstrating a transparent and therefore answerable account of these methodological processes, including justification of the decisions behind recruiting participants, data collection and analysis, along with ethical and validity related considerations, the foundations for a robust and valid qualitative study are formed. Consequently, the following chapter will demonstrate how these approaches produced an authentic and grounded response to the research questions as introduced in Chapter 1.

Chapter 5 – Findings and discussion

5.1. Chapter overview

Thematic analysis resulted in five key themes: *learning, power forces, online worlds, practices* and *personal attributes*, with each theme holding various sub-themes. Subsequently, the organisation of these themes allowed for the research questions to be answered alongside detailed insights into *how* influential communicative distortions become manifest. Thus, this chapter will outline the various ways in which these disruptions occurred as described by the participants, starting with the section below relating to their chosen learning objects. The chapter will then continue with participant excerpts and further discussion against the literature relating to perceptions of online/offline spaces and the extent to which participants recognise and understand the presence of strategy and communicative distortions, including the role of *the care of the self* and the *gaze*.

5.2. Chosen learning objects and the online link

Each participant described various manifestations of both the online and offline learning spaces throughout both interviews. At interview 2, however, all participants except Nicola seemed to choose a learning object that held some sort of direct link to the online space. Thus, Jennifer and Craig chose to design their objects, with each participant uploading representations of their objects in online spaces for their peers to see. Peter chose a water test that was both sourced and facilitated through online affordances and William chose his laptop, which he also revealed toward the end of interview 2 also embodied *all* of the affordances of online spaces. Sean, who through his choice of his favourite aquatic print book, also made a direct link to online worlds, through his comparative suspicions levelled at types of information found online. Nicola on the other hand, seemed to produce an object that appeared to resist any immediate relationship to the online world, however, through her narrative, this link to the online subsequently became clear and will be explained in later sections.

The discussion of the findings will commence below and thus, the ways in which participants understood their chosen learning objects will also be discussed where applicable. In assuming a beginning, however, the explanation of the findings will start with the ways in which

participants might represent and understand connections between contextual instances of their online and offline learning worlds.

5.3. Perceptions of the online/offline learning space

The following excerpt introduces William, who positions himself as a learner who predominantly avoids printed books as a learning resource, opting instead for online information:

> *I'm not a big book reader, and I think with the internet being such an infinite resource these days, it is so easy just to type in what you want to find and then you have a whole multitude of different things you can look at and try and kind of sift the bullshit from the you know, the decent advice and research, I think that's how I prefer increasing my knowledge.* (William/1/359)

Whilst avoiding books, William suggests an acceptance that some information found online might be less than authentic and therefore requires some additional processes to find authentic knowledge. Likewise, Peter, a published aquatic author and previous aquatic journalist, explains that rather than avoiding books as described by William, his learning experiences reflect how the absence of information in print introduces the online world as an alternative option for his learning. He describes this occurrence within a context of searching for a specific species of catfish:

> *I started looking them up and (other aquatic author) has got a book and I've got his book and I looked them up in the book and I thought this is my conscious learning but I thought it's not my everyday learning anymore, my everyday learning now straightaway is online so when this came up I just thought I've captured it, I'm actually learning online, this isn't in a book so if I said to you, my learning now is from books and from magazines, I'd be wrong because it is only a very small percentage of my learning so my learning now in aquatics is very much online.* (Peter/2/459).

Thus, Peter describes instances of *conscious learning* and *everyday learning*, with the former being attributed to his own purposeful action of locating a book and the latter more

suggestable of a more automated instance of thematization mediated by online modes. Peter also talks of his early experiences with *Web 1.0*:

> *All the sites then were American, so that was a new stage of learning, another stage of learning whereby you could match pictures up, match people from other countries kind of experience whereas in print magazines it is quite one way, you kind of profess about this fish and then maybe someone will write a letter, maybe they won't but with a cichlid, with the internet it has helped me learn by, you know (fish photographer) the (photographer's home country) fish guy? Fish from (S. American country)? He's cool, he does habitats and he chirped up on one of my Facebook pages last night and I said ah (fish photographer), you've swam in the rivers with diamond tetras, while I've got you, can you tell me what other fish are biotope correct with diamond tetras and he told me, how cool is that?* (Peter/1/759)

The above narrative from Peter, demonstrates his reflections of learning through a brand-new digital affordance, framed within exposure to new cultural experiences, highlighting a contrast with the seemingly time-consuming, asynchronous and unpredictable affordances of learning from print magazines. Peter is also celebrating a particular online effect that centres on the perceived effortless reach of the internet, along with its synchronous effects that allowed him to obtain valuable information in a speedy fashion from a prominent aquatic filmmaker that he holds in high esteem.

Nicola, who was relatively new to the aquatic hobby at the time of interview describes how she initially turned to online spaces for help in understanding her new fish, which quickly produced an instance of inadvertent learning that highlighted her mistakes:

> *I guess the first thing is you get them home and you want what's best for them so you start Googling about the fish that you've just bought and what you have to do and then you realise that you've done it all wrong (laughs) and no tank cycle, no anything, suddenly you're like ah, how do I fix it now, erm and then I started joining websites and forums and asking questions.* (Nicola/1/75).

In a similar way to Nicola's experience above, Jennifer also talks of how the online space inadvertently produced an unsolicited learning opportunity, through the act of uploading a photo of her new aquarium:

> *So that's when we joined the Facebook site, (an aquatic Facebook group) and we took a picture of it set up and what have you and we said we were going on holiday and that's when people started to say fishless cycle, fishless cycle. Have you done this, what are you using, well, we're not using anything, so they said you can't just let it sit there, it's not going to do anything, read up on the fishless cycle and these links started coming through and so on.* (Jennifer/1/80)

Whereas Nicola's inadvertent online learning experience was highlighted through her own research activities, Jennifer's seems directly driven by the views of her online peers. Consequently, in addition to their opinions, her peers also provided resources via web-links. Jennifer's partner, Craig, describes another instance of online learning prompted by an observation in the offline space:

> *We didn't realise that that would shoot the pH[5],up because we were novices at the time, so we are checking our pH, so we looked on the internet, which is a great thing nowadays compared to when, you know. (Craig/1/115)*

What is interesting about Craig's quote is the end of his sentence, which suggests that the considerations of the time before online worlds and the current era, produces a new and distinct taken for granted assumption. This is based upon his lack of spoken detail, coupled with his expectation that I would know what he means and in some way links to Peter's 'celebrity' experience above that online affordances positively contribute to hobby learning. Additionally, in reference to the assertion that the dividing line between online and offline contexts deserves less prominence (Williams, 2006), Craig's narrative suggests a tendency to benchmark the desirable aspects of the online learning space against the pre-internet era – an

[5] Within aquatics, pH refers to the scale used to measure the range of acidity and alkalinity in correspondence with the biological requirements of a particular organism, determined through the ecological characteristics of their natural habitat.

era which he is hinting might not have offered him the same information in a timely way. Therefore, in this instance, the distinctions between the online and offline learning space seem a useful and comparative way to highlight how online spaces facilitated learning. Craig's narrative also contrasts with the aquatic journalist's position outlined in section 1.2.2., that emphasised the online space as the chief culprit in terms of producing conflicting information. In Craig's instance, the online space as the *main offender* attracts a reprieve to position the established ways of the offline to hold disruptive communicative effects.

William also talks of the availability of online worlds, however, he does so in terms that express how communicating online is essential for his hobby:

> *I would say, potentially, it could almost die to a degree because other than you now, I don't know anyone else who actually keeps fish, so I'd have no communication with anyone about them and I'm not the type of person who would go to a fish shop and then start having in depth conversations with people and just rock up and start talking to people, so I'd not be able to improve my learning from that perspective, erm, so yeah, I'd just be stuck in the status quo and I could set up another tank but from what I've already got in terms of previous freshwater or my marine tank but I'd not be able to develop it and because I couldn't share it with anyone almost, would it diminish the enjoyment? I think it probably would to a degree.* (William/2/165)

William's narrative above, therefore, positions the online space as conducive to maintaining the status of hobbyist and as a place through which he can not only share representations of his practices and experiences but also learn from peers. Thus, the notion that online spaces foster a sense of belonging (Greer, 2012) is supported through William's narrative, along with Chen, (2007) and Fang & Chiu (2010) assertions that meaningful online hobby learning requires additional external motivational factors that transcend individual participation. Furthermore, William also explains that his own circumstances means that communication with others in online spaces is his only option, with his own individual differences meaning he would not seek out others to talk to within the physical space of retail. He had, however, felt motivated enough to attend society night meetings, which lends support to the idea that sharing in the online space unfolds differently than in the physical to stand in contrast to Slater's (2002)

assertion that the online space promotes an extension of the self – if this was the case, William would arguably feel as communicatively free as he does online in the space of the aquatic shop.

Nicola was the first participant to join me for interview two, with her choice of learning object being a photograph of a domestic scene, depicting her partner sat watching their new aquarium that they had chosen together. Here, she explains why:

> *It basically sums up fish keeping for me. I just like looking at them so that obviously for your tape, it is a picture of my boyfriend just sitting there and looking at the fish and that's what we got them for, just to look at, just watch them, sometimes they watch us as well.* (Nicola/2/16)

As the interview progressed, Nicola revealed further insights that indicated her engagement with her hobby shared a deep affiliation with the physical setting of the home:

> *But this sums up to me pet fish keeping, not like some of the guys down the club were they're into lots of tanks and they're all outside in the garage. (Nicola/2/93)*

The above quote suggests Nicola undertakes observational learning from her fish by being in close proximity to them, an assumption supported by her narrative from her first interview in relation to her noticing her fish seemed to lack colour in the morning[6]:

> *It's just like something I've observed and then I Google it for example, when I first got them I noticed that the tetra were invisible when I came in in the morning, I thought ooo, do fish actually sleep, so then you start to research and you're like, what do tetra do when they sleep and then you learn how the colour actually works and one question leads to another, yeah and you just end up Googling it while watching TV.* (Nicola/1/451)

[6] This is a commonly observed phenomena, with one theory explaining this as relating to fish needing to be less conspicuous whilst sleeping, as part of a camouflaging effect.

It is apparent therefore, that Nicola enjoys watching her fish and that this type of offline observational hobby practice, particularly when framed within the narrative immediately above, introduces a link to the online world, despite this not being initially obvious from her chosen object. Nicola also describes how one offline observation linked to multiple online learning instances. Thus, Nicola's domestic scenario outlined here aligns with a less clearly defined online/offline link but one that exists, nonetheless. Furthermore, it is a link that only became visible upon production of a seemingly offline photographic reference. Ultimately, this highlights the link between the online/offline space as reminiscent of Castell's (2001) suggestion that the online space is not 'a space of its own', with Nicola's learning context here arguably shifting fluidly between observation in the offline space and research in the online.

In contrast to his affinity for online information, William's experiences at the aquatic meetings demonstrate his appreciation of the information produced through no apparent direct link to online worlds. This value, however, occurs alongside an associated caveat that advises triangulating the information found in physical spaces with that found in the online:

> *Because you know, you'll get to know who does know what they're talking about, so I would be more inclined to listen to them, I would probably still go away from those conversations and just quickly Google something just to get a little bit of back up and make sure they do know what they've told me is correct but, you know if someone, I would like to think that someone who has been keeping fish forty years, fifty years, bred them and kept unusual species, they probably have a little bit more knowledge than the majority of the people on these forums who might have only been keeping fish for a couple of years, they've just got experience, with that you learn things or at least hope to learn things.* (William/1/370)

Here, William touches upon the issue of how the perception of authenticity in the offline space unfolds differently to the online space. Thus, he introduces the idea that hobbyist experience gathered over decades might hold more worth than information produced in online forums, suggesting the offline space has a perceived legitimacy. Furthermore, his narrative also suggests that the offline space might hold a type of *gaze* that serves to authenticate the individual as more authentic when positioned away from online spaces. Thus, it may be more

challenging to consistently elicit duplicitous behaviours *over time* under the normalising gaze of one's peers at monthly meetings. Additionally, considering the aquatic hobby generally unfolds within the home, the hobbyist is also free to enact under varying degrees of privacy, much of which lies within their control. There is also the possibility that the perception of the authentic hobbyist in offline spaces is produced and reproduced over time alongside relatively sparse opportunities to definitively demonstrate hobby pursuits as occurring *outside* of the meeting space. Therefore, any perceived aquatic expert could potentially earn an esteemed reputation in any setting, whilst undergoing little or no external peer review. Likewise, their expert status might also be bolstered through influences of information – distorted or otherwise - gleaned from influential online sources that are equally difficult to detect. The busy nature of meeting nights, as explained in Chapter 4, might also mean that a lack of in-depth discussion to ascertain authenticity might never be realised. These specific issues - however hypothetical - were not touched upon by William or any other participants. This absence both supports and possibly explains the assertion of Lin, Su & Potenza, (2018) that the integration of the online and offline space is poorly understood; which may be related to an imbalance in recognising the capability for information from either space to be circulated in unpredictable directions.

As her learning progressed online, Nicola describes the reasons for seeking out an offline participatory hobby space:

> *Erm, well I was talking on this forum quite more and more and really getting into learning about things and like friends and family were getting fed up with me talking about fish so I started Googling if there are any clubs in the area and then found Preston, erm and it was the closest one and I thought well I am free, I might as well go down and have a look.* (Nicola/1/293)

In addition to exhausting online sources and individuals to converse with at home, Nicola goes on to explain her desire to communicate aspects of her hobby outside of the domestic setting:

> *I just wanted to talk about fish to other fish people who were interested in fish and then if I've got any questions, I knew there was going to be lots of knowledgeable people there.* (Nicola/1/301)

The above excerpts from both William and Nicola suggest that despite frequenting online forums, online environments cannot provide all that the aquatic hobbyist is looking for. This also links to William's beliefs that knowledgeable people are more likely to be found in physical spaces than in online platforms, suggesting there may be elements of the process through which knowledge is found in physical spaces that feels more desirable than the knowledge found online. Thus, this shares a link to Agarwal, Gupta & Kraut's (2008) study that supports the type of interactions found in the offline setting as more trustworthy than those that conceal particular body language cues. Furthermore, in reconsidering Wollebæk, Karlsen, Steen-Johnsen & Enjolras, (2019) assertion, the innate human ability to detect threats seems to influence informal learning behaviour in favour of positioning offline information and communication as more authentic. In some ways, this mindset suggests that elements of the *gaze* are actively welcomed in terms of embracing the knowledge of those deemed expert in their field, suggesting that hobbyists have an urge to identify learning spaces that might either have reduced threats or at least foster the ability to uncover them. In addition, Suler (2000), in suggesting strategies for online/offline integration, encourages individuals to interact with any of their normally 'offline' peers, online. Whilst I understand and to some degree embrace the general sentiment behind this advice – which is to foster understandings of the differences produced by both spaces - it does seem a little contrived, perhaps more so if required to explain the reasons you would wish to do this to the person you would hope to engage within an online setting.

Nicola describes a how a sense of belonging becomes cultivated through meeting up with like-minded others in a physical space, regardless of this being a meeting night or another hobbyist:

> *Yeah, it's a load of people sat around talking about fish, I like it because for example, I can talk to you about my fishes behavioural problems and you're not weirded out by it, you're not telling me it's just a fish, you know, don't be silly.* (Nicola/1/318).

The above narrative, therefore, suggests that some aspects of a hobby might only be voiced with others who share the same interest. This also suggests that individuals who come together to share and collaborate information about their hobby can also triangulate and therefore develop their knowledge by learning through informal conversation. Consequently, the connection between online and offline learning spaces and the process of triangulation – framed as attempts to synthesise values held within multiple messages from diverse resources – was a significant aspect of aquatic hobbyists learning, in reference to the link between online and offline learning worlds.

5.3.1. Triangulation *within* and *between* the online and offline space

As introduced in Chapter 2, *triangulation* and *thematization* are linked through the latter's role in generating a pause to the lifeworld to initiate the location of meaning. To serve as a reminder, when triangulation – defined here as the process of analysing multiple perspectives to form an account of *meaning* (Salkind, 2010) – is required, so too is a temporary suspension of the allegiance to a belief. This intermission, therefore, then allows the process of thematization to commence, which as outlined in Chapter 2, involves permutations of existing beliefs and newly encountered information. Subsequently, participants explained 3 different learning instances that prompted a need for thematization. Firstly, new information could render existing beliefs or practices to become either abruptly inexplicable or feel in some way perplexing. Secondly, information from multiple sources - that was gathered to address a particular enquiry – could produce an inability to immediately reconcile the various values held within each sources' perceived differences. Thirdly, new information also revealed previously unencountered beliefs and practices that subsequently required a temporary pause in order to appraise their worth. Subsequently, participants described thematization and triangulation of information as a significant process within their learning. Thus, Sean is introduced and as a reminder, along with his own hobby pursuits, Sean also managed the role of online moderator within a popular aquatic related forum. As part of his own learning, Sean described his understanding of triangulation, with his experiences centred around the difficulties of reconciling his own empirical information with a form of substantive evidence from other sources. Therefore, triangulation becomes perceived to be a troublesome endeavour as a result of *both* online and offline spaces. This is demonstrated by Sean's enduring uncertainty

of the parental origin of a specific type of hybrid[7] fish frequently seen for sale in commercial shops. Sean also exhibits a degree of suspicion in relation to why this information cannot be found:

> *I've never seen photographs, ironically, you get photos were they show parrot fish hybridising with other cichlids, and there's eggs and fry but then you see one photo of newly hatched wrigglers but you never see anything after that you never see where you think these are parrot hybrids at whatever six months old, twelve months and you'd think given today's day and age where the internet allows you to have instant access around the world to people keeping, breeding, er catching, the greater the chance of it happening, the greater the chance of fry [8] surviving especially with better techniques and obviously the breeders who are producing these fish in the first place you know, it is still very secretive, there's got to be a way for them to produce so many parrot fish.* (Sean/1/113)

Sean's frustrations at the perceived inability for the online space to offer him *something* relating to the origin of these hybrids is clearly palpable. Furthermore, he finds it difficult to reconcile his own observation of baby fish with the value that he attaches to the online affordances:

> *I've seen parrot fish breeding in a fish tank in (local town), eggs, fanning the eggs and those eggs were not infertile, they were fertile and I don't know whether the resulting fry survived but I've heard lots of anecdotal evidence where people have said they have managed to breed them.* (Sean/1/106)

Therefore, failure to remove certain features of a suspicion, whilst simultaneously being faced with contradictory evidence, indicates a corresponding resistance to triangulation. He goes on to say:

[7] In reference to the fish here, this particular hybrid – the *parrot fish cichlid* - is of unknown parentage, with accounts of viable breeding attempts also scarce.
[8] A fry is another name for newly hatched or birthed fish: a baby.

> *But they've never really narrowed it down consistently for everyone who says it is this this and this, other people come along and say actually it is this as well and it's like, we've got this this and this and we've got the morphogenetic of that fish and that fish and we've picked up various things.* (Sean/1/130)

Therefore, Sean's excerpt demonstrates that there are times when the information held within the offline space cannot be triangulated through online learning and subsequently fails to offer the hobbyist definitive information to add to their lifeworld. This suggests, therefore, that some physically located aquatic practices– represented by the settings that serve to house and potentially breed these fish – are sufficiently governed that they remain concealed to the extent that they resist becoming visible on the horizon of *online learning domains*. In turn, online spaces hold a corresponding absence of useful information. In applied terms, this means that suspicions remain as such and knowledge *victories* lie frustratingly out of reach, regardless of their perceived observed authenticity. Thus, the distortions to knowledge formation, as described extensively by Habermas and Foucault, that relate to the extent to which the individual might be able to form authentic conclusions, is upheld.

With reference to the triangulation of information from the physical space with that found within online spaces, when talking about his learning object, Peter also talks of the disruptive nature of online affordances. Here, he talks about the function of his high-specification test kit that shares a connection to the online domain through both its sourcing and subsequent dissemination of the test's results:

> *Maybe the corals are better off in the ocean because there's thirty six things that I now need to try and balance and that can be really alarmist as well, you know like a basic test kit will tell you if you have got ammonia and if you have ammonia you think, I didn't know that, panic stations, now you've got thirty six panic stations so it's kind of if I get too far into it, if it spoils my enjoyment, if I spend a couple of hours a day on this, I'll just think, I'll just go back to freshwater because it's too much science and not enough enjoyment.* (Peter/2/540)

Here, Peter is describing the functions of his learning object as able to test a working sample of marine water for a wide range of elements and compounds[9], with the outcome benchmarked against known standardised values of typical sea water. As he demonstrates, it is this high-tech function that also serves to disrupt Peter's understanding of his own knowledge and practices. Furthermore, despite having a critical engagement with his hobby, along with a vested interest in his aquatic career, Peter describes how *too* much technical detail can conspire to make the hobby unenjoyable. Peter even talks about distancing himself from marine aquatics completely in the event that it becomes *too* technical. When asked about his confidence in the accuracy of the results, his response indicates his awareness that the relatively new technology is not necessarily transparent:

> *So, this is like the wild west of testing, because this is like a private company that is not adhering to anything, it isn't a big enough industry, that is the problem, it might be life or death for a coral or a fish on a tiny scale.* (Peter/2/879)

Therefore, the excerpt above indicates the vulnerability of new innovations to the hobby scene in terms of the absence of any regulatory body. This suggests a desired urge for a particular type of regulatory *gaze* that would work in the interests of the hobbyist. Ultimately, the results of his test, regardless of their perceived accuracy or usefulness, can arguably enter into the information domain of the aquatic hobbyist and be circulated as a resource through which ideas and beliefs might be formed. This adds further support to the complexities associated with how the values within information produced in one learning context might pervade into another (Edwards, 2009) to exist with meaning that may or may not hold a direct relevance or legitimacy there (Foucault, 1980, p.136).

All participants talked of the problems triangulating information found within online hobby spaces and the physical space of the aquatic retail shop. Here, Craig first describes his online learning approaches:

[9] Marine or sea water generally comprises a fixed and stable composition of elements worldwide, however, in an aquarium these can become destabilised through evaporation, dilution or poor water management.

> *I look at more than one source, I don't just take one source as read, sometimes I look at three or four different sources to take a general overview and if they're wildly different then I'll ask advice or I'll put a post on Facebook about this difference but more often than not, you know through four sources or five sources you are going to get somewhere, I feel you're going to get somewhere.* (Craig/1/397)

Which when asked about how he applies this technique to consolidating the information generated by aquatic retail shops, he replied:

> *The only difficulty that we've found is you go into an LFS [10] and you say what is that and they give you the wrong information so when you get home, it's not the fish that you want, that you thought it was, is this suitable or it grows to this big, you get home, you look at it and you think so you look at it on Google and you're looking all the way through and you find actually, it's not a peacock, it's a Mbuna, it goes to ten inches, not that, it's a different one of these so you think, yeah.* (Craig/1/405)

Here, Craig's frustrations at the poor advice found in the aquatic shop environment are evident. Furthermore, that Craig perceives information gathered from the online space as potentially useful in the offline setting, implies that his lifeworld can offer him information for thematization when confronted with possible offline communicative distortions. Nicola also talked about her perception of communication within the retail setting:

> *We asked them, what can we have in, we found the tank first and then we said what can we have in this tank and they said you can have a fighter but the poor advice was that they said that we could have a fighter [11] and tetra in a 19 litre tank so that's what we ended up doing. (Nicola/1/46)*

Explained through her experience of two incompatible fish species within a small aquarium, Nicola concluded that this retail advice was unsatisfactory, however, she could not form this

[10] LFS is a commonly used abbreviation in aquatic worlds: *local fish shop*
[11] A *fighter* is a colloquial term for the popular *Betta splendens*: The *Siamese fighting fish,* which is commonly found for sale in general aquatic retail settings

belief at the point that the advice was given. Sean also talks of his experience within the setting of the aquatic shop:

> *There was one shop in (nearby town) just up the road, there was a shop there and it was co-owned by two people, there was a man and his wife and then there was this other fella who was their business partner, now depending on what day you went in, you would get either the couple or the other fella, now the other fella sounded like he knew everything and he was like this new product was great and you know you can put this in, and keep this fish what that fish but he knew nothing.* (Sean/1/707)

When asked to explain more of his thoughts on this particular setting, he continued:

> *Because of my experiences, sometimes you can just tell the bullshit, he would, you'd listen to him and I'd be looking at the fish and I'd listen to him talking to someone else who you know, a newbie, so someone who had never set up fish before so what can I do to keep these tropical, can I keep them with them and I'd listen to him and I'd be cringing inside, I'd be like biting my lip because I'd be like you cannot give out advice like this, it was terrible advice and very often I'd find myself going round to the customer, explaining who I was and saying look I have kept fish for so many years and go to this place for your information go to this forum, go to (popular print magazine's forum), get that book or that magazine, do not listen to a word that guy has said, you keep them with them, then that will eat that.* (Sean/1/716)

Sean's narrative above offers additional understandings to the function of a link between online and offline worlds. Firstly, he talks of how his experience in aquatics allows him to speedily detect distorted communication. Therefore, he is only experiencing a fleeting interruption to the smooth running of his lifeworld, which then means he is able to quickly realise subsequent actions. Secondly, his additional identity as an online moderator might further bolster his confidence in (i) approaching strangers so that he might (ii) contradict the information that retail have offered as a truth so that (iii) he might persuade these strangers of the ethical value held within his interruption. Furthermore, Sean is also offering these strangers their own sources for triangulation in the event that he does not convince them of

his better argument. Despite these being sanctioned by him, they arguably widen out the stranger's information arena. Jennifer's experiences of triangulating retail information with her own approaches appears to represent a tentative combination of suspicion and acceptance of norms:

> *I've learnt not to take the advice from the LFS unless I've had the same piece of advice from half a dozen different ones.* (Jennifer/1/163)

Whilst understanding a certain type of safety in accepting the majority view, the idea that retail outlets might *all* hold a similar communicative discourse, as produced through their commercial interests, was not acknowledged by Jennifer here. Rather, the consensus seems to be the appealing persuasive factor. Peter explains his own experiences of this state of affairs through his own retail experiences as an aquatic shop assistant:

> *People would bring fish back and they'd killed them, and you'd just go fucking hell, how did you manage that? That always got me, that's not self-doubt, that's kind of dismay that other people weren't willing to kind of, its 50 % isn't it, you can tell them but they have got to go off and learn for themselves and they go home with the fish and they choose not to act on my advice and then when the fish dies they bring it back and it's like a faulty blue ray player then, they put it on the counter and go I want my money back, well, I can guess why it died, mine are still alive and healthy, I'm actually a bit pissed off that you managed to kill this fish in twelve hours after I'd conditioned it for six months, sad, really sad, and they're like, well I want my money back, well fine, if I give you your money back, what are you going to do? Buy another one? But then you're going to kill another one, so now I don't want you to have them.* (Peter/1/1192)

Peter's understanding of the conflicts presented through the retail discourse are obvious, however, he also explains his frustrations at the customer-hobbyist, who he perceives to have done minimal learning in terms of preparing for the needs of their new fish and preventing catastrophe. William, also explains his negative perception of retail outlets, which contrast with his aforementioned perception of the physical space producing authentic knowledge:

> *Shops? No, I don't think they align with our principles, I think the vast majority of shop owners are looking to sell and I think it is a difficult position for them and I'm sure a lot of them enter the commercial business as fish keepers but then they've got the overheads and the cost of running a shop and they're probably initially torn between well I want to give good advice but I also want to put food on my family's table.* (William/1/546)

William's account above aligns with Peter's before it and highlights the ethical conflict between keeping aquatic animals as a hobbyist and the transformation of the value of these animals upon creation of a commercial space. Subsequently, the organism's worth in terms of enjoyment, becomes replaced with a degree of unethical dedication to their retail worth. Thus, Peter offers his explanation as to how aquatic shops hold a degree of power over consumer choices:

> *Well, it is pretty much everything, I mean it governs what you keep, what tank you keep them in, it is everything, it is where you get your fish food, you know, the hobby is reliant on them and I class online as retail as well.* (Peter/1/1343)

Peter's narrative, therefore, suggests that the commercial aquatic sector plays a significant role in some of the aspects that shape the hobby. There is also the suggestion here that much like formal curricula might indicate the boundaries that knowledge might lie within, the discourses of the retail sector might also offer clues to some of the problems it seems to create. Thus, considering an aquarium that has been set up without adhering to well established ethical practices, any fish sold would be at risk of ammonia poisoning and death if placed in a new aquarium, with an immature filter colony. Therefore, taking this scenario to its worst-case, the customer heads back to the shop with a *tank in crisis* and is now sold the various paraphernalia needed to 'fix' it, driven by the pressure of saving their other fish or avoiding this scenario again. Subsequently, and to emphasise a link to learning, the hobbyist directed toward a commercial solution might never enter an arena for understanding what went wrong in a way that supports tackling the problem at its root cause. Thus, the disruptive influence of Habermas' cognitive interests is revealed as holding a degree of sway over the information that

enters the hobbyists' domain – with the retailer protecting their own instrumental endeavour of economic survival through the fundamental steering media of commerce.

In terms of other commercially disrupted learning opportunities, Peter also explains his frustrations at both the marketable aspects and perceived lack of accuracy held within the displays of large public aquaria:

> *I went to London Aquarium a lot and was disappointed with a biotope from the Congo with a plec in it and things like that, I was disappointed with the fish that were looking shitty and crappy, you know, thin or contorted, that sort of thing erm, and I don't like the commercialism how you are kind of rushed through very quickly and end up in the gift shop and then you know, buy an expensive Coke and a burger and go.* (Peter/1/1364)

Here, Peter is expressing his dismay at finding a *Plecostomus* – a 'plec' – predominantly from Brazil, in a public display tank - that will be seen by thousands of visitors each year – labelled as holding fish native to central Africa. There is also his perception that some of the fish were poor anatomical specimens that would not necessarily represent that particular species in the best way. Peter also talks of his dislike of the commercial nature of public aquaria and the presence of additional money-making ventures. He also felt that public aquaria perceived the public's aquatic tastes to centre around the more mainstream species of marine animals:

> *They need to see lionfish, seahorses, Dory (rolls eyes), octopus, jellyfish, sharks.* (Peter/1/1387)

In alluding to *Dory*, and not the common name of the *regal tang,* Peter is also voicing his frustrations that centres on the introduction of specific consumer demands in response to products of mass media. *Finding Dory* (Disney/Pixar, 2016) is the sequel to *Finding Nemo* (Disney/Pixar, 2003) and at the release of each film, much discussion unfolded in aquatic forums that represented anxieties that the popularity of these films produces a demand driven by both new and existing fishkeepers wishing to keep these species. Thus, *Nemo*, a *clownfish*, is a relatively easy species to keep and breed in captivity, meaning that large collections of

these fish from the wild could generally be avoided. These particular fish also have a natural symbiotic[12] relationship with the sea anemone, which can also be successfully kept in captivity. The regal tang, however – *Dory* – is a fish that in captivity, anecdotally does not survive or breed as well as the latter, with opinion divided between hobbyists and academics as to the effect that popular mass media products have on consumer demand and issues of conservation and animal welfare (Veríssimo, Anderson & Tlusty, 2020). Subsequently, Peter's mention of *Dory* and not the fish's *actual* name suggests a derision that aligns with feelings circulated by general aquatic hobbyists at the time of each films' release. In offering his version of a more enlightening option that would stand as an alternative to the species that are seemingly in high demand, or perpetually on view, he concedes that his choice of substituting African Rift Valley fish for the sharks would be futile:

> *But of course, no one would pay to see it, I wanted more accuracy, more learning.* (Peter/1/1382)

The effects of an aquatic related children's film shown in cinemas can, therefore, pervade into the displays of public aquaria, which, in turn descends into the retail arena and subsequently, into people's homes through hobbyists' beliefs and practices. Thus, Peter's frustrations here relate to the reproduction of aquatic norms through a mechanism that is in some part influenced by the powerful effects of mass media. Furthermore, he also considers this to be at the detriment of exposing large numbers of the public to learning about other fish species that are both less demanding to keep, with fewer consequences for the natural environment.

Despite aquatic retail shops being fundamentally associated with serving the needs of aquatic hobbyists, it seems apparent that the principles of all the hobbyists within this study do not align with their commercial counterparts. Public aquaria, that might serve the needs of both existing and future aquatic enthusiasts – whilst only mentioned by Peter – suggests that they seem to display what they perceive the public to want to pay to see. Consequently, the contrast between some of the differences in information found within various types of physical

[12] The symbiotic relationship of the clownfish and the anemone is one where each animal reciprocally protects the other in exchange for a *survival* benefit. Thus, clownfish live within the shelter of the anemone and in return for protecting it from other predators, the fish cannot be stung by its tentacles.

learning environments starts to emerge, framed within the perceived effects of distortions to communicative action driven by – as Habermas warns - competing interests of commercial endeavours and ethics. Furthermore, that William positions the information found online *and* in the retail setting as vulnerable to communicative and strategic distortions - *yet* perceives society meetings nights as more likely to hold undistorted truths, there is a suggestion that the discourses found *between* various aquatic offline spaces also produce different, contextually dependent perceptions of distortive effects. What is significant here is the absence of any connection between the various spheres of the aquatic hobby and a suspicion that information within any sphere might infiltrate another.

The idea of *the care of the self* (Foucault, 2020) might also be linked here, considering that the narratives concerned with retail demonstrate that before the hobbyist *can* form a suspicion that problematic areas of aquatics exist, they first need to acknowledge an instance that renders the messages communicated by the commercial aquatic sector as incongruous with their own hobby contexts and experiences. Thus, as all participants explained an instance of retail distortion, they therefore have *some* understanding of it. As outlined above, however, attempting to solve fundamental hobby issues through commercial means can produce a corresponding tendency to deny the need for locating an arena for rational debate. In turn, a chance to thematize is also lost. Similarly, any traversing of the liminal space of the threshold concept might only exist as occurring through the discourses of retail, which further removes a need for debate but also positions retail settings as the solution. These effects, therefore, might influence the extent to which hobbyists and potential hobbyists are able to fully understand the wider picture of the aquatic hobby landscape and subsequently, the other areas of learning that might be available to them as sources for triangulation. Ultimately, participant narratives here align with the damning journalists' narratives in chapters 1 and 2, with the findings outlined so far offering an explanation for the production and reproduction of certain aquatic hobby norms. Consequently, the contrast between some of the differences in information found within various types of physical learning environments starts to emerge, framed within the perceived effects of communicative distortions driven by competing interests of commercial endeavours and ethics.

5.4. Understanding the presence of strategy and distortions

In an attempt to further understand the ability of hobbyists to recognise potential distortions that might be found in their learning worlds, William offers the following in relation to his account of the activities of a fellow hobbyist he encountered in a marine related social media group:

> *You often see people who are quite vocal, so there is a guy on one of the erm, actually I am on a marine keeping Facebook group, there's a guy called (name removed) and I've had a couple of not conversations, but discussions about various things and he almost tried to present himself as really knowledgeable guy and then after a few days I found out he'd had his marine tank about three weeks!* (William/1/185)

Here, William is suggesting that in order for a hobbyist to present as *knowledgeable* to their online peers, a type of tacit rule exists that relates to a relationship between length of time in the hobby and the integrity of the knowledge that person holds. Thus, he goes on to say:

> *Just telling me about like, erm, certain pieces of equipment, and 'oh, I've had these testing kits, they're absolutely tosh, they're completely inaccurate blah de blah' and then you think well, you've only had your tank three weeks, you're not in a position to say that that testing kit compares to x, y or z testing kit because you haven't got a body of evidence that's large enough to make any sort of useful conclusion to, but he would happily say oh that's rubbish or this is absolutely brilliant*. (William/1/194)

In relation to Habermas' ideal conditions for speech, it appears that William's description of the behaviour of his fellow aquarist relates to the rules concerned with being *truthful* and having *sincere expression*. Therefore, from William's perspective, the communicative acts of his *imposter-type* hobbyist stand at odds with both these conditions. Furthermore, William feels this person has wrongly positioned themselves to hold authoritative knowledge, however the reasons for the other hobbyist doing so are unspecified and therefore, potentially complex and multiple. Thus, the individual described by William may feel emboldened by the affordances of social media, or he may feel his experiences so far within the hobby entitle him to express any information as knowledge regardless of his time served. Furthermore, this

observation raises questions as to the association between theoretical knowledge and practical knowledge, considering the hobbyist described by William may potentially have been accruing theoretical marine knowledge for many years. Similarly, William's alleged *imposter* could have lurked (Baym, 2015, p. 97) within the online marine forums for years, building his knowledge through learning or the online equivalent of *listening* (Crawford, 2011) from the experiences of others, yet never making his presence known to his peers until he engaged in practical hobby acts. Therefore, his knowledge journey could be unrelated to any desire to be purposefully strategic for individual gain, with this instance suggesting that while *listening* as a *lurker* has a positive effect for the hobbyist who is lurking, that this is done without any obvious visibility to peers also produces a corresponding indistinct awareness that this mode of communication can be a viable and authentic act. Additionally, the *imposter* may have limited or alternative understandings of modesty or the expectations of other hobbyists if the more subtle concerns of hobby *netiquette* exist as tacit. Therefore, in the absence of explicit direction from peers, the ability for all hobbyist behaviours to assemble in a consistent way might also be correspondingly weak.

In contrast to William's imposter, Jennifer states:

> *I might look to see what people's posts are saying but I don't tend to comment on them because I don't feel I know enough about the illnesses to be able to put a positive criticism or a positive advice on there.* (Jennifer/2/189)

Therefore, in online worlds, Jennifer's approach as a self-declared newcomer is one of modesty in terms of her own perceived knowledge. Subsequently, she is choosing to not introduce any form of unsubstantiated information into the hobby community, which suggests she has an understanding that doing so would be misrepresenting her own perceived status within the community. As a result, she is demonstrating an alignment with the *ideal conditions for speech* and *care of the self* through her own gaze that desires authentic reproductions of information. In addition, Jennifer describes an unfriendly instance in an online CoP:

> *They were hostile (laughs) and I was like, well I don't know what I'm doing, you know, I'm trying to research it, I found out what fish I like, oh you can't have them in there and its far too small and they were really bullying really.* (Jennifer/1/89)

Therefore, Jennifer may also be extrinsically motivated by her past experiences and now mediated by previous hostile reactions resulting in a desire to avoid a similar experience.

Peter, however, might offer another angle on why hobbyists might introduce purposeful of strategic actions. Peter, with his almost lifelong affinity with aquatics, explains how at times, his own experiences and understandings of the ethics of the natural world have a tendency to create an unavoidable tension within his hobby worlds. It is his own lack of agreement with his hobby peers that introduces disruption, that while strategically *purposeful*, carry a perceived ethically motivated strategy. He introduces this topic using the example that his hobbyist peers could:

> *Rock up at (aquatic society meeting night) and be like what do you keep, I keep barbs, I'm into devarios or whatever, well I keep ex situ[13] conservation lipochromis matumbi hunter from Lake Victoria, expecting everyone to go (gasps) shit, you're like a God, you know, and they want that.* (Peter/2/324)

Peter goes on to explain how, at times, he felt compelled to offer a response:

> *Every so often, just for a bit of sport, (imitates typing action) I used to turn on my own kind and you know some guy would say I've got you know, rare Victorians[14] and I'd go, are they ever going to go back to the lake then, "well er you know, we're preserving them and blah blah blah", so what kind of bloodlines and genetics are you, are you just breeding so you've got a batch of them? And then they were siblings and now you have bred them, and they have now got siblings that you have bred*

[13] *Ex situ* refers to conservation efforts that occur away from the natural habitat under threat, i.e. breeding in captivity.
[14] *Victorian* refers to a type of *cichlidae* fish endemic to Lake Victoria in *Africa's Great Rift Valley*. These fish are under threat of extinction as a result of the introduction of invasive and predatory game fish.

> *again and again so are they ever going to get back to the lake, I don't think they are, are they? I don't think you are actually helping anyone.* (Peter/2/364)

In his narrative that also hints at his understanding of identity and belonging to a particular tribe, Peter is outlining his derision at other hobbyists keeping endangered fish that he considers disadvantaged through (i) being forced to reproduce within the narrow gene-pool and (ii) the apparent disinclination of his fellow aquarists to increase the natural numbers of these through breeding and re-release programmes, despite (iii) the breeders having an awareness of Victorian cichlids' status of *ex situ*. All of which suggests that as Peter identifies as *belonging* to a particular CoP, as based upon his phrase "*turn on my own kind*", it is this *belonging* that frames his own understanding that he has introduced conflict amongst his aquatic peers. In critical and emancipatory terms, however, it is this same *affinity* with the broader aquatic community that has arguably helped shape his perceptions and experience, which subsequently means that he has no reservations in pursuing and challenging suspicions *within* that community.

William's account of the marine *imposter* above remains unfulfilled in terms of any indication of the intention to be strategic. Here, however, Peter's suspicion is one that suggests aquatic hobbyists might adopt strategic actions in order to boost their ego through elevations of their online CoP position – acts which when communicated in the absence of tangible evidence of their ethical intentions, arguably serve to misrepresent the complete picture. Additionally, in reference to his chosen learning object of a laptop, William also explains his understanding of *how* online learning platforms *allow* the hobbyist to assume such strategic positions. In this instance, he describes how a hobbyist might use third-party information as if it were their own:

> *Well, I think it puts you in a powerful position because you can be discussing things with people that actually have very little experience of but a quick Google and you can almost come across like an expert, so it is brilliant from that perspective and especially if you're quite quick at using a laptop, you know you could come up with answers that would completely mask any inexperience you have because the answers you have are at your fingertips.* (William/2/87)

William's use of the word *powerful* in the excerpt above suggests that hobbyists who are extrinsically motivated by a desire to achieve recognition by being perceived by others to be knowledgeable or *expert*, could easily do so through the communicative affordances of online learning spaces. Additionally, the extrinsically motivated hobbyist is free to use potentially undetectable shortcuts to achieving an instantaneous knowledgeable persona, whereas the intrinsically minded hobbyist would reach a position of credibility, not through fabrication but through a more natural process of knowledge building over time. Therefore, the hobbyist who has an intrinsically motivated mindset, might prefer to enact their hobby under different conditions to that of the extrinsically motivated hobbyist, yet the credible hobbyist is also vulnerable to inescapable, calculated actions of their peers. Consequently, the type of extrinsically motivated behaviour described here requires a degree of manipulation in order to misrepresent the *truth*. Therefore, this behaviour contrasts to the intrinsically motivated hobbyist who may be less inclined to seek the reactions of others in order for their hobby to remain meaningful, therefore bypassing a need for duplicitous strategy. Similarly, the hobbyist may be motivated by the extrinsic response of perceived experts or peers, however, they might prefer an *intrinsically* driven *credible* learning journey, free from misrepresentation, in order to secure it. Consequently, the process through which an attribution of *credibility* might be gained is complex and liable to different methods, as determined by the intrinsic or extrinsic motivations of the hobbyist, with both intrinsic and extrinsic prompts seemingly resistant to any definitive indication of the level of undesirable strategy they hold within. Thus, Kuvaas, Buch, Weibel, Dysvik & Nerstad's, (2017) assertion that intrinsic or extrinsic motivating factors defy revealing any clues to their users' integrity, might be upheld.

In addition to how strategic actions might be introduced and the extent therefore that this might be acknowledged and understood, within online settings, William, explains:

> *I think I might be a little bit naïve in a lot of instances, in that I just take things at face value and if someone says something, unless it is generally, unless it is pointed out and someone tells me, wait a minute, they've come about that from x, y or z, erm, I just take it as a given that they do know what they're talking about.* (William/2/97)

In the above narrative, William explains his inability to form a suspicion around potential disingenuous actions of his online peers as framed within a context of the inherent characteristics of his own self. When asked to expand on matters of *being genuine*, William explains:

> *Yeah, I mean I think, you hit a good point there about being genuine, so you also expect people to be genuine and then I like to think that, when, I like to think I am a fairly open book, that if I post something, there's never kind of a underlying alternative message, I don't tend to be like passive aggressive about things, if I've got something to say, I might say it, don't hold on to emotions, if I'm angry, I'll be angry for a bit but then I'll forget about it, I won't then you hold it against someone for months and months to get some sort of revenge down the line, I think life's too short for that.* (William/2/127)

In an excerpt that represents one of the fundamental principles of communicative action, William's narrative above represents his urge to judge his fellow hobbyists under the same conditions that he acts within. It is these very conditions, however, that he also feels contribute to instances where he might be exposed to strategic intentions. Consequently, William understands their *presence* but concedes they are difficult to *identify*. Therefore, William could be said to have an awareness that aligns with the idea of the *care of the self*, however, having such an awareness cannot always translate into accurately locating the source of interference. Craig also talks about his experiences in managing areas of potential conflict online. In the following excerpt, the context relates to the comments he received within the society's Facebook group, generated by his own thread through which he also shared his chosen learning object:

> *I don't want to be harsh with anyone, and this chap has said 'I'd have used metal pipe clips as a plastic heater clip will dry out and become brittle' eventually, whether it will or won't, it hasn't yet, we'll see, I've put 'great, I'll keep that in mind'.* (Craig/2/253)

In ways different to Peter's somewhat confrontational manner and the seemingly overly trusting nature of William, Craig adopts a more diplomatic and agreeable stance, regardless of his actual feelings about the practical functionality of his invention so far. Along with Craig's explicit declaration that he does not wish to be 'harsh', this approach suggests both a desire to avoid broadcasting an account of his direct experience and also a reluctance to engage in any further debate. On the other hand, William's inherent tendency to avoid holding grudges might also produce a corresponding absence of ill feelings within his lifeworld. This absence could, in turn, mean that he has nothing within the lifeworld through which to base future judgements of potential strategy on, and therefore this could be one explanation for his self-declared naivety. Likewise, Peter may feel that areas of conflict are significant enough to pay attention to and therefore, these instances make their way into the lifeworld and can easily and repeatedly be called upon in the form of a grudge-like recollection. Additionally, these grudge-type memories are then able to offer a form of contextual ammunition that ultimately serves to challenge the actions of those hobbyists perceived to be using purposeful strategies to boost both ego and community status, whilst also holding an inverse amount of ethical integrity. Consequently, different personalities - mediated by inherent individual differences – may play an influential role in the ability of the hobbyist to identify and challenge potential disingenuous or ambiguous behaviours. Furthermore, this is regardless of the hobbyist understanding that they may be at play. Therefore, despite having some *care of the self*, as demonstrated through William's understanding of strategy, it is ultimately disrupted by a failure to locate it.

Jennifer also talks about the challenges of the interpretation of meaning within online spaces. Furthermore, the process of interpretation proves particularly frustrating for her upon realising the *absence* of clear information necessary to address a particular concern. Consequently, despite not being able to immediately understand all components within a process, enough thematization has occurred to introduce the idea that (i) appropriate information is missing from the lifeworld and therefore this suggests (ii) the negotiation of a threshold concept needs to occur that will transform this complex information into a simplified version. Thus, Jennifer explains the justification for her chosen learning object which represents her attempt at compiling a list of step by step instructions to help aquarists cycle their filters:

> *I found what was already on the internet, on Google or whatever sites was, it was too technical, it didn't make sense, I just wanted basic do this and by doing that, this will happen and by doing this, that will happen.* (Jennifer/2/77)

Here, Jennifer is demonstrating an altruistic urge to help others triangulate their own cache of information in the event that, as per her own experience, the advice encountered through online sources presents as confusing, complicated and therefore generally unhelpful. Additionally, her object was well received:

> *I posted the instructions up for everybody to see and then other people will sort of like say oooo can you send me this?* (Jennifer/2/117)

In successfully crossing her own liminal space into the safety of the location of meaning, Jennifer has inadvertently introduced her own influential force in the form of her resource, that by its very simplified nature, might prevent her peers from undertaking their own negotiation of a threshold concept in the same way that she has. Therefore, her learning object, as a representation of a useful peer-to-peer resource could prevent her peers from ever needing to contend with unfamiliar and complicated scientific terms. There is also the assumption that in introducing her own expression of legitimate peripheral participation, and also potentially denying peers the chance to have their own similar learning journey is in itself a form of influence.

Despite the seemingly attractive qualities of triangulating information, triangulation of *both* online and offline information and practices, whilst useful, is also replete with disruptive conditions relating to matters of the value of the hobby itself and the time in which to enact it. This is demonstrated by Peter and Jennifer's observations here that suggest *too* many instances of thematization, or even the suspicion that this *might* occur is enough to produce feelings of confusion, frustration or disengagement. Overcoming these issues - as demonstrated by Jennifer successfully closing the liminal space represented by the complexity of technical information – served to also produce a useful resource. Craig, however, suggests that once suspicions arise from one domain, the instance of thematization is useful as it offers a starting point for triangulation or negotiation of a liminal spaces elsewhere.

Further analysis of the data revealed other occurrences of *thematization* that offer additional insights into the link *between* online and offline learning environments. Here, Peter describes a recent fractious online interaction with another aquatic enthusiast. To offer some context, this particular instance relates to a lack of consensus surrounding two different types of filter equipment. In ways that are different to his somewhat antagonistic actions outlined earlier, Peter defends his argument through his adversary refusing an invitation to come into his place of work and view the equipment under discussion:

> *Well first of all I was open to her and said, look come and visit, I'd have shown her the filter like you and gone this is the media, this is the fifteen year old test pond, this pond has been under tests for fifteen years and if we want to we will get into you know the microscope, slides, bacteria and all that and then she was like I've had (that particular brand of filter), it's not very good, blah blah blah, you know, I don't want to come and see your filter and then I was just kind of like well I've given you the opportunity.* (Peter/2/37)

Here, Peter is giving his adversary the opportunity to exchange the online setting in which they initially communicated for one of his workplace, so that he might explain in more applied terms the points that support his view. Consequently, here, the online world can be seen as an *abstract* space that is insufficient for thorough debate. Thus, the physical space is being offered within a context of *illumination* and could represent Peter's urge to locate an arena for debate. Peter's offer, therefore, embodies his own strong desire to convince his opposition of his own 'better argument'. As the quote highlights, however, she did not take him up on this offer, leaving the impression that (i) she holds resolute beliefs and (ii) these beliefs are strong enough to continue as she is or that (iii) the perception that Peter's located arena already holds a power bias. An additional scenario might be based upon the idea that to be convinced of a 'better argument' also requires the individual to detach themselves from previously held beliefs that may also underpin other fundamental areas of their hobby life such as technical, emotional and social domains. Furthermore, if knowledge has been produced through the somewhat tempestuous nature of negotiating a threshold concept, then the firm affiliation with resultant beliefs as described by Perkins (2006) might also be supported. In other words,

once a particular threshold concept has been navigated, this journey might eliminate any urgency to remain alert to other potential liminal spaces that might be similarly advantageous to confront.

The scenario above, therefore, demonstrates the ability for the information held within the lifeworld to have a tendency to resist or limit opportunities for thematization to occur. Likewise, this effect seems to share a relationship with the creation of tribal behaviours and echo chambers, whereby hobbyists assign and preserve their own personal values in correspondence with a wider, like-minded group that considers their own beliefs as immutable to any opposing information (Wollebæk, Karlsen, Steen-Johnsen & Enjolras, 2019). Furthermore, Peter explains that this same hobbyist shows an inclination to intermittently reignite tensions:

> *Occasionally she trolls me and erm, (laughs) so she wants this argument.* (Peter/2/121)

The act of *trolling,* or deliberately introducing distortions to a particular state of affairs in online settings can arguably exist in a multitude of ways. In this instance, however, Peter's perception of his adversary's motivations lies within a context of her desire to revisit the conditions of their earlier conflict - not necessarily in terms of the previous subject matter - but with respect to the fact that they *are* rivals. He continues in reference to a Facebook comment, posted some time later:

> *I like let it go and we put this pond on, huge pond on, like thirty thousand gallons in (local town) and it's got four (Peter's filter) on it and she trolled me and went, fucking hell, look at the size of that filter thing, look how big and obtrusive your (Peter's filter) is and I was like, its thirty thousand gallons, it's a fucking huge pond, it's like a swimming pool.* (Peter/2/122)

The behaviour of Peter's adversary, therefore, also suggests that conflict, once established and never resolved, introduces further instances of communicative disruption. Furthermore, these instances of uninvited online disruptions stand in contrast to Peter's previous unsolicited

positive experience that emerged as a result of serendipitous access a high-profile aquatic filmmaker. That the adversary appears to demonstrate trolling behaviour in future instances, through posting inflammatory communications without a direct prompt, suggest that she is motivated through her own intrinsic motivation of *trolling*. Furthermore, that Peter's invitation was snubbed, highlights her unwillingness to want to *be convinced* and therefore demonstrates that a refusal to triangulate or link the communicative transactions of online and offline platforms might serve to reinforce justified beliefs through the inability of producing a space perceived to facilitate agreement. Consequently, regardless of the *truths* held within Peter's defence, these lively exchanges suggest that in ways similar to an over-abundance of thematization, an absence of thematization is also problematic for learning. One final observation is that the introduction of the *opposing gaze* of ones' aquatic peers holds no positive effect in terms of working toward agreement, with the exception of the *agreement to disagree,* which under these terms here, might arguably be considered a fundamentally weak form of consensus and one that cannot remove conflict.

5.4.1. Access and permanence of information

In considering the access and permanence of information, settings afforded by the internet posed some problematic challenges for aquatic hobbyists in terms of the loss of valuable sources of knowledge. In the following excerpt, Sean talks of his preference for printed books:

> *I can take that (points to book) with me anywhere, whereas if it is online, there are restrictions, I might not be able to get online on a train, middle of the Atlantic, I could be on a cruise and go right, I'm going to read this and I can read it whereas I might be on a boat that doesn't have Wi-Fi or doesn't have the internet so out of touch or out of reach, the information on the internet isn't permanent.* (Sean/1/494)

The above quote demonstrates Sean's understanding that various technological factors need to be in place in order to guarantee access to online information, which aligns with the assertion that digital affordances are vulnerable to their own influences on functions (Wright & Parchoma, 2011). In terms of the safeguarding of online information, this also posed challenges, with Sean describing the disruption caused by corporate-technological governance

when the forum he moderated became at risk of removal as part of an announced shift to the alternative space of a Facebook page:

> *Well, as we have proven over the last twelve months with the forum, you know it was announced it was closing down, it wasn't compatible with the software that the company were using for their online stuff, so as such the forum was put on notice.* (Sean/1/502)

In addition to the threat outlined above, Sean also talks about his perception of those who make the decisions:

> *They'd put so much effort into building the forum to what it was, tweaking it, changing it, and then someone comes along in suit and says right, we are doing away with this because we don't really see it as, everyone is on Facebook and Twitter so we want to get into that, but you are alienating the footfall you get from the forum that then go on to the main site or use the main site to get to the forum and so forth so it was that connection with the magazine and the staff that they weren't seeing.* (Sean/1/544)

Firstly, Sean perceives that those corporate agents who have the power to introduce disruptive changes, do so under different conditions than those held by those who predominantly use that space for their hobby. Secondly, moving a dedicated forum space away from its associated online space of its print magazine is understood to be capable of having an effect on print magazine sales – with readers of the magazine *and* forum creating reciprocal conditions for the perpetuation of both communicative modes. Thirdly, Sean is expressing his frustration at those corporate agents who failed to recognise the previous point of this reciprocal relationship between forum users and magazine readership.

The above narratives, therefore, demonstrate the vulnerability of online information in terms of how technological advances might render existing types of online spaces obsolete. Furthermore, this instance demonstrates that different rates of technological innovation exist that can serve to introduce disruptive changes to the ways in which hobbyists access information. Sean explains this within a context of the new forum space that was offered by

the corporate agents after lobbying by administrative staff and forum members resulted in the original forum being moved to another forum-type space but under the contract of another web-provider:

> *We lost a lot of posters and members, even I was only going on occasionally to check and get rid of SPAM, erm so and I think that has really damaged the forum, it has now got a reprieve and it is back, someone has said, yes we can do it, yes it is going through teething problems trying to get that, the old forum isn't really the same as the new, the software isn't the same so as moderators and admin, we are trying to work out what to do, it was just click, click, and click but say for banning someone or we are deleting posts or merging posts it was quite simple, we knew what we were doing, now it's sort of ten clicks to do just that one thing and ten clicks to do something else.* Sean/1/510)

In addition to these disruptive effects for users, Sean also describes the distortions to the information that was once easy to find:

> *Sometimes I'll click on a link and there'll be a breeding account or a keeping account or catching account of a fish and the photos aren't uploaded because they have been corrupted or have been deleted from where they were hosted.* (Sean/1/521)

The above extracts, therefore, demonstrate the influence of change within established online learning settings, including the disengagement of both forum members and administrative staff in response to the initial announcement that the forum would close. As a result, when a reprieve was given, and the forum shifted to an alternative forum space instead of Facebook, Sean's narrative suggests permanent damage had already occurred. Thus, the creation of 'cyber ghost-towns' (Phang, Kankanhalli & Sabherwal, 2009) might be attributable to corporate influences that lie outside direct control of general users and not solely the product of badly moderated spaces as asserted by Ransbotham & Kane (2011).

The above extracts demonstrate the consequences of change, with the following passage illustrating both Sean's strategy for saving cherished information and his enduring belief that

the information held within online domains always exists as unstable and fragile in terms of its permanence:

> *I didn't want that information lost, because it is fine if it is in a book, especially a mass produced book because if you lose a copy, you can always get another copy somewhere whereas if it is online, if it is online, then it is gone, it's not permanent, everybody says that you put something on the internet and it's there forever, it is only there forever as long as it is stored somewhere else it is gone.* (Sean/1/585)

The synthesis of Sean's narratives above, therefore, demonstrates a good understanding of the ways that online information is subject to various levels of manipulation and deletion as a result of different rates of response to changes in innovation generated across physical and online spaces by any stakeholders. Sean also demonstrates an allegiance with printed books, which is further endorsed through his choice of an aquatic book as his learning object. Peter, also declares his affinity with printed books:

> *Reading, one hundred per cent, massive book collection, read, read, read, information sponge.* (Peter/1/561)

In terms of communicative distortions, however, when asked how he manages the assumption that printed knowledge may become obsolete in time, Peter explained this through a context of his anxieties in relation to his own authorship status and the potential perceptions of his readership:

> *It is interesting, so as an author of books, it challenges me because people could buy my first book that's fifteen years old and out of date and I think fucking hell, don't take too much notice of that, I was probably talking about God knows what fifteen years ago.* (Peter/1/571)

Peter also goes on to balance the complexities of the relevance of printed information through his view that books from much further back in time still bear technical relevance:

> *But at the same time, I've got lots of books from the 50s and 60s, I mean I've got one book from the 1890s and it was written by Innes*[15] *who neons are named after, and fucking hell it was genius! Don't keep goldfish in bowls, too small, erm, paradise fish are hardy, erm, use plants, aquascape, erm you know, it is all about eco systems, ah God!* (Peter/1/580)

These historical aspects of aquatics that Peter describes are recognisable to myself as aligning with the current ethical issues that *goldfish* - as members of the carp family – grow relatively large and therefore, contrary to their ubiquitous availability, are not considered suitable for general aquaria by certain enthusiasts, with the archetypal *bowl* deemed particularly unethical. Subsequently, a much easier fish in terms of husbandry demands is the *paradise fish* and therefore, often suggested as an alternative and if a hobbyist or pet owner wanted a coldwater[16] fish, this would be suitable substitute. Furthermore, this older book also emphasises that creating a biotope through the addition of plants – that is, constructing the aquaria to resemble a wild habitat – is also a desirable outcome for the hobbyist and one that reflects the popular contemporary aquatic *aquascaping* sub-hobbyist scene. Therefore, Peter's narrative suggests that practical hobby information held within older books *can* withstand the test of time, which also aligns with the understandings of Sean and to some extent, William. That Peter feels he might have introduced a certain level of historical disruption with reference to his own published works however, suggests that he is more critical of his own communication than that of his historical peers. In this instance, Peter seems to be alluding to a troublesome issue that he has inadvertently introduced – that is, his reflections indicate that he cannot be sure if his own comparable print information will stand the test of time in the same way as he perceived this to have happened to hobbyists of the past. Therefore, Peter could be positioned as acting under the anxieties driven by a *normalising gaze,* that is sequentially normalised through his idea that information from bygone times sufficiently persisted to *remain* relevant. That Peter has reflected upon these historical ideas *and* continues to align with them, demonstrates that the gaze might sometimes be positioned as being a force

[15] William T. Innes: Late 19th/early 20th Century American fish biologist.

[16] Fish are generally classed as either *coldwater*, requiring no additional heat source, *tropical*, meaning they require a heater to survive or *temperate*, which means they have some tolerance for either a heated or non-heated aquarium.

that resists an attribution of neither positive nor negative. Thus, it may fundamentally exist as neutral entity, with its value dependent upon the subsequent ideas or actions it stimulates. Furthermore, despite it having to be informed and therefore constructed by *something*, the gaze might also be produced by the self in response to personal reflection, to exist as Foucault suggested, in a less obvious manifestation compared with the presence of overt social rules.

If Peter positions the function of this historical gaze within a self-critical framework, this could also serve to encourage him to find ways to make his future books also remain relevant for a future audience. He is, after all, the author and is therefore free to interpret his aquatics related beliefs and practices in any way he wishes, provided they satisfy the brief driven by his publisher, that is in turn, driven by the needs created by the hobby readership. That he is a part of the aquatic hobby mass market in terms of communication is almost irrelevant here, if anything it only reflects the on-going progression of the modern landscape that Habermas explained in 1962 as being both inevitable and unavoidable (Habermas, 1989). What is significant is, however, is Peter's awareness of a need to produce relevant, ethical information for the hobby mass market and is therefore an approach that aligns with the very underpinning emancipatory purpose of critical theory.

5.4.2. Presentation and format of information

Participants also identified the ways in which the presentation of information introduced communicative distortions. Here, Sean describes the challenges concerned with the formatting within social media websites:

> *With Facebook, the information, you can't keep track, you post something there and then someone else puts something and then it doesn't just go down one space and down and down, it might jump fifty times and someone else comments on an old post and it jumps it back up and then it's like you're scrolling down and you're trying to find it.* (Sean/1/505)

The narrative above demonstrates the frustrations that Sean has found within the design functions of Facebook groups, particularly in terms of keeping track of the constantly updated information added to threads as posts. The issue here is not necessarily related to the

complexities of information but one that is more concerned with the order of it. This disruption is also supported by William explaining:

> *Drawing people away from actual forums to erm just general social media, I don't think it is necessarily a good change because at least with a forum you can, it is very easy to kind of search topics and threads about certain topics whereas, Facebook, the same thing comes up over and over and over again and the conversations never seem to develop rather than an initial superficial overview which then more often than not turns into an argument of some sort, opinions differ but that doesn't lead to any further learning points.* (William/1/161)

Both excerpts above demonstrate their respective participants' familiarity with the format of Facebook, along with the suspicion that should the forum be moved there, it would suffer various communicative distortions in relation to chronological and subject-related order and individual differences – all of which impact negatively on learning.

Another format-related disruption was described by William in relation to a species of rainbow fish that he was considering keeping:

> *This PDF that I've downloaded is five hundred and seventy pages, I mean hellfire, its long!* (William/1/255)

The above extract emphasises the scope of information found online and when asked if he would read it all, he answered:

> *No, absolutely not, I mean it is so in depth but for each species of rainbow fish, it was telling you were it has been collected, temperature, surface temperature, water temperatures.* (William/1/260)

The above narratives, therefore, also highlights the breadth of detail that is available to aquatic hobbyists and the subsequent disinclination to read it in response to its lengthy presentation.

This effect links to Peter's earlier test-kit narrative to suggest that hobbyists maintain an awareness of those aspects that might negatively impact on their hobby time.

In addition to in-depth information, technical information was also identified as disruptive to finding meaning. In the following extract, Jennifer describes how alternative representations of information were not helpful in a particular learning quest. The context here is her explanation of her chosen learning object:

> *I'd see him putting all these graphs on and all of this that I originally saw on the internet that made absolutely no sense to me because they were too technical they were too scientific, I just wanted it in basic, this eats this, changes it to that, something else eats that and changes it to that.* (Jennifer/2/142)

Jennifer's experience highlights that information presented through pictorial formats may not have immediate universal meaning, particularly for newcomers. Thus, Jennifer is declaring a need for information to be available in alternative forms, hence her decision to create a simplified resource, that even though free from technical complexities, would achieve the same outcome as information displayed through graphs and statistics.

5.4.3. Language terms as communicative distortion

In following on from pictorial representations of information, Jennifer also described the distracting effect of the use of scientific names across the aquatic hobby. In brief, scientific names of animals and plants are attributed once an organism becomes apparent to humans. Each scientific name then becomes a unique identifier for that organism but the use of the common names – of which there could be multiple for a single animal – also continues, with enthusiasts exercising their own free will as to which they use. Thus, the following excerpt is in reference to Jennifer's confusion in hearing scientific names of fish – usually Latin or Greek in origin – within the setting of a busy aquatic auction:

> *We'd gone in to the local shop and it might say erm, 'cockatoo cichlid', you know, 'harlequin rasbora', whatever, 'bronze corys' and they were doing these lots and the auctioneer was holding the bags up saying corydorus such and such and I was like*

> *what? And we were trying to get on the internet and we couldn't get service so we didn't buy a great deal.* (Jennifer/1/220)

The above narrative demonstrates the confusing effect of unfamiliar linguistic embodiments of familiar fish, which essentially rendered the auction useless in terms of understanding what fish to bid on. Furthermore, in an online setting, the scientific names also proved troublesome in definitively identifying species of fish as represented via her own photograph of some new fish she had recently bought. Jennifer explained that she:

> *Took a photograph of them, put them on (the aquatic society's) group site to be shot down in flames by three different people saying, they're not Viejita they're Macmasteri, so I said, well, whatever they are, they're beautiful and we like them.* (Jennifer/1/292)

As an aquatic enthusiast, I was also familiar with the conundrum that these two species of fish present – to exhaustively explain *all* the reasons why is beyond the scope of this thesis - but it endures as primarily driven by their similar appearance and the inability to find triangulation opportunities that would ascertain their exact geographical provenance. Regardless of *who* is wrong or right, the difficulties in identification suggest that anyone contributing their opinion - online or otherwise does so predominantly through guesswork. William also talks of scientific names explained as an interruptive disruption to reading:

> *If I was reading an article and it was only mentioning the Latin names, it would absolutely do my head in and I'd kind of, I'd be put off.* (William/1/523)

The Greek and Latin origins of scientific descriptions seemed to disrupt communicative effects, with the usefulness in terms of identification in either the offline or online settings becoming somewhat redundant. That these words are perceived to be disruptive might also be attributable to them simply being unfamiliar. That there are often multiple attributable names for fish, along with variations within their linguistic expression, indicates a lack of broad consensus of preference, suggesting that beyond the scientific name, common names emerge

and are upheld in response to cultural influences that might always render them meaningless across different aquatic communities.

Distortions to language through editing were also identified as disruptive to learning. Thus, William describes how the trend for individuals to use truncated words in online forums served to disrupt learning experiences in ways different to his aforementioned aversion to long documents or his inability to spot disingenuous behaviour. Thus, in reference to his online hobby settings, William described how he appraised hobbyists' knowledge in order to form such conclusions, he replied:

> *I think part of my thoughts about what makes someone knowledgeable is obviously, they've got to have the understanding but the fact they can actually convey that in decent English, if people can write a sentence that has proper grammar and punctuation, they automatically supersede someone who actually might have the same level of knowledge but uses text talk or can't use a capital letter.*
> (William/1/82)

William is using a grammatical *gaze* to form judgments that relate to the extent of their knowledge. He goes on to explain the reasons for this attribution further:

> *'Text talk' and a lack of grammar, I see it as a form of laziness that if you can't even be bothered to type out a proper sentence, does that then sort of leach into other areas of your life, so what you may feel is an area that you are quite knowledgeable in, is it only because you have not kind of pushed your knowledge to research to any great depth because you can't write y-o-u, you write u, so you might have read one article on whitespot and gone well there we go, I know all about it now and that one article is just one end of the spectrum of different opinions or research.*
> (William/1/99)

William's narrative above demonstrates his perception that words that have been abbreviated contribute to forming attributions of peer laziness. Consequently, this serves to introduce

further insecurities for William regarding the overall integrity of peer information. This leads to him stating that this type of language style means he will disregard their posts:

> *I can't actually recall any times where I've had one of these responses in kind of text talk but then has been validated and made me think yeah, they really do know what they're on about, I think almost to a degree, when I see those kind of responses, I then become maybe a little bit erm, sort of tunnel vision and maybe even disregard them, unless they are then further validated by somebody who has good form.* (William/1/113)

William's narrative suggests that if he is convinced of a hobbyists' integrity, this is validated from a peer he perceives to be trustworthy. That he does not divulge the influences that produce his understanding of 'good form' may imply he is relying on a third-party influence to arbitrate the contributory worth of peers. That language itself produces its own distortions to learning clearly aligns with the general premise of Habermas' theory of communicative action that also foreground the presence of Foucault's normalising gaze within matters of linguistic semantics.

5.4.4. Ownership, circulation and simulation of information

Another type of potential strategic action observed by participants was the issue of paraphrased information. This concern was something that I had reflected upon many times and in re-visiting my March 2017 fieldnotes from the meeting night, I recorded the following observation after being prompted by catching sight of the club secretary as he entered the room:

> *I was reminded of a very recent post I saw in the society Facebook group where the club secretary was in dialogue with another member. The other member was apologising for his spelling mistake of a fish name in previous post. The club secretary in his acknowledgement responded with something like, 'don't worry, it separates the aquarists from the Googlists'. I understood this comment to be related to individuals who copy and paste information from the Internet, who may or may not understand any of the knowledge within or have any notion of the credibility of its source. It seems a spelling mistake reveals an intriguing insight into the perceived*

> *perceptions and attributions of online hobby practices and sources of knowledge. I also got to thinking about the vast resource that the Internet is and reflected upon the often-derogatory way that I have seen people be instructed to 'Google something' themselves, instead of coming onto a forum and posting a question. I also remember seeing the phrase LMGTFY (let me Google that for you) and an animated GIF conveying the same message. Ontologically, a forum veteran might ultimately see newbie questions as trivial, perhaps forgetting the time they were in that position.* (Author fieldnotes/March 2017/12)

As my musings highlight, the issue of the extent to which hobbyists might purposefully or otherwise misrepresent information to give the impression of deriving from themselves, is one potential strategic action that felt relatable to aquatic communities. Thus, held within this scenario is the added assumption that a spelling mistake is more likely to indicate that information came from a *first-hand* account and therefore holds integrity, with perfect spelling considered as an indication that the information was imported from a *third-party* source. This observation stands in contrast to William's earlier assumption that the seemingly imperfect presentation of abbreviated or misspelt words corresponds with a lack of integrity. Furthermore, a spelling mistake cannot become apparent within verbal conversation, which raises questions around the possibility of any equivalent effect that might follow a spoken mispronunciation. This question also links to another reflection from that same night:

> *I am convinced that asking similar, (perceived to be trivial or naïve) questions in a face to face social setting would not result in condescending brush offs – only the most hardened would dare do this to another's face. I made a note to ask questions on this in future interviews.* (Author fieldnotes/March 2017/35)

My experiences and reflections, in conjunction with those of the participants indicate other ways in which the effects of different communicative modes unfold both within and as a result of online or offline worlds. Furthermore, participants' narratives help to link this issue with Foucault's idea of the *care of the self*. Firstly, William appears to have formed his own normalised standards in relation to the language skills of his peers, that if not achieved, means he disregards their knowledge, or looks for validation from his perceived trusted peers.

Through his explanation that poor language skills could indicate laziness in other areas of life, including fish keeping practises, he is justifying this view and therefore demonstrating how he might protect himself against poor advice or knowledge. As he is maintaining a state of vigilance in terms of his observation of his peers' language, he is also demonstrating *care of the self*, particularly if the influences that maintain his perception of trust held within his peers' opinions is also upheld. The club secretary is also maintaining his own vigilance around his peers' language to protect against the same type of communicative disruption. The only difference here is that the club secretary uses a near-opposite response through which to form his own gaze.

Here, Peter talks about the frustrations that arose when other hobbyists offered him a certain *type* of information from online spaces:

> *And then you get the Googlers, so you go on there and you're not having a conversation with a person with knowledge, you're having a conversation with a person who just Googles the answer to everything, oh thanks for that, I can Google the fucking answer, I'm asking you if you grew the plant, I don't need you to go on Wikipedia and copy and paste it back into the forum, yeah? Just tell me you don't know, tell me you haven't kept it, if I wanted to know about it, I would find it myself, I'm perfectly capable.* (Peter/1/889)

Peter is demonstrating his vigilance and intolerance to information that he perceives to be unauthentic and therefore useless. Therefore, in a later conversation with Sean, I asked him to explain his thoughts on the idea of the 'Googlers' and the 'Googlists'. He responded:

> *I think there is a difference between a Googlist, the way (club secretary) is referring to it you know and then there's where people are doing it for research because I know (club secretary) goes and asks questions on forums and Googles stuff, just as much as I do, we all do, regardless of our knowledge skills, there is always someone else or somewhere else that has got more accurate knowledge or has got a greater knowledge.* (Sean/1/436)

The narratives above, therefore, suggests there are differences between the *Googler*/*Googlist* and the hobbyist who also uses search engines to pursue authentic knowledge quests. Therefore, the hobbyist *gaze* produces the formation of new identities that results in a new way to communicate about those hobbyists in online worlds who are perceived to be producing strategic actions. In explaining what he might consider an authentic or pure source of knowledge, Sean points to the pile of specialist aquatic journals by his side, goes on to say:

> *You've then got information by people going out and collecting the fish, how they survive in the wild and how to tell them apart and what their living conditions are like in the wild compared to what they are like to someone who is keeping them in a tanks, so not like books that paraphrase another book that they haven't kept them.* (Sean/1/469)

The extract above demonstrates Sean's belief that some aquatic books appear to be near facsimiles of already existing knowledge found in other books. By emphasising a preference for specific types of book Sean therefore asserts his desire to avoid undesirable actions of emulation. Contrarily, in reference to her opinion on aquatic books, Nicola expresses her distrust of printed forms of hobbyist communication, whilst also demonstrating a preference for online knowledge pursuits:

> *Erm, not really. I think it is because I am not sure if the information in it would be correct, with the internet you can ask like several different peoples' opinions separately and see which one comes back the most, or which one you were sort of thinking as well.* (Nicola/1/153)

The above narrative suggests a reliance upon the online space, expressed through the appeal of peer triangulation that is perceived to be inapplicable to books. In addition, Nicola's account of a majority consensus appears to hold two functions. Firstly, a consensus might offer legitimacy through a direct representation of multiple independent affirmations of a particular phenomenon. Secondly, it also acts to authorise an existing assumption. What is not clear here, however, is *how many* affirmations are needed in order to accept one's own assumption. Furthermore, there was also a general absence again of any awareness of the troublesome

issue that the information gathered through online spaces has to have come from *somewhere*, again foregrounding an inability to overtly link the information held in both the online and offline space. In addition, William, who earlier expressed his rejection of books as a learning mode, also contradicts this own view by explaining that when attempting to triangulate knowledge found in online spaces, he prioritises printed text as a more authentic:

> *Rather than just forum typed answers, I would, I would be more inclined to believe stuff that's from a published book, or certified scholarly article, erm, but if those aren't available and there's an awful lot of people in the hobby agreeing with that response kind of take that on board and think well they probably are right.* (William/1/140)

Therefore, William explains his faith in a majority agreement found online, which seems to serve a purpose of the next best place to go to after printed resources. Jennifer also talks about the value of the majority, however, she does this within a context that the consensus is not always grounded in experience. In the following excerpt, Jennifer is declaring that her experience with a specific species contradicted those of the majority:

> *I suppose just trying to, if half a dozen people out of ten are all saying the same thing then you think well that's the general consensus, it might not be 100% right but that's the general consensus, so we'll take a chance you know and that's all you can do really, it's like when we had a the Mbuna tank, everybody were like oh my God you don't want to be having an auratus in there, it will be, it's a Satan fish and all of this, he was the quietest fish in the tank.* (Jennifer/1/514)

Jennifer – as a newcomer to the hobby – therefore, has quickly learned to understand that majority accounts of other hobbyists' experiences do not necessarily equate to being useful in comparison with her own. In terms of peers' accounts of fish behaviours, Sean shares his explanation for how these types of distortions might happen:

> *What you tend to find with books is an author will reference so many other books as part of his writing and what tends to happen is basically he has lifted say a certain*

> *species of fish like a Botia letia and the skunk loach, loads of books, started writing those up as peaceful, suitable for community tank and then that information gets carried from that book to another book to another book to another book and then it is like a spreading out web then, it just spreads then, so from one writer, writing that, lots of other people write the same thing when a lot of the time, sometimes those writers have never even kept the fish, they are just paraphrasing, writing parrot fashion.* (Sean/1/52)

As Sean suggests, information in the physical space is also prone to re-circulation, however, once again, there was no explicit awareness that these perceived offline distortions might enter into the spaces of the online. Consequently, if the hobbyist fails to detect and challenge this type of information in either the physical or online space, they themselves may also be vulnerable to re-producing aquatic hobbying norms.

Jennifer also talked about the communicative challenges around speaking her truths, despite her experiences indicating otherwise. The following excerpt is in relation to her perceived success in keeping a particular group of fish, traditionally thought incompatible. She explains how despite her empirical experience, she would rather not voice it:

> *I certainly wouldn't want to be sort of challenging someone, not necessarily challenging them or even just saying well if they say oh well don't keep this with that, I wouldn't want to say well, to be fair, we're keeping them together and everything's healthy and they're breeding. (Jennifer/1/749)*

Jennifer is a relative newcomer to the hobby, nonetheless, she has started on a journey that is now beginning to hold its own experiences that mean her *lifeworld* is able to overlap with that of her peers. The extent to which she might communicate these experiences as representations of her own hobby-truths, however, does seem to be mediated by those hobbyists within the online space. Thus, she goes on to reflect:

> *Maybe in time but if something came up, if we were sat on a table for example, at the February meeting and (other member) said I've got a such and such and its doing this and this and I don't, I've tried this and I don't know what to do, and I might say*

> *well, well I've had that and I've tried, like on a bit more of a one to one maybe? (Jennifer/1/754)*

It is interesting, therefore, to note that Jennifer's chosen learning object was designed to both minimise the introduction of strategic actions through an attempt to offer a rational account of what can be perceived as a daunting technical process. Furthermore, her chosen learning object is also in response to her own negative experiences in interpreting meaning and therefore also acts as a peer learning resource. That it is a written attempt to reflect the interpretation of her practical experiences, demonstrates a confidence not reflected through her reluctance to speak her truth to her peers. Furthermore, that her chosen learning object was also verified by a third party before it was circulated, implies a different type of triangulation context. Thus, speaking a perceived controversial truth, in the *absence* of third-party verification, means the uncertainty of not knowing *how* it will be received produces silence.

Peter also offers his ideas on the function and ability of online search engines, along with his thoughts on the ability for the consensus to equate to a truth.

> *It depends who is at the top of Google I suppose when you type in 'how to keep angel fish' or whatever, at the end of my (journalist) career, me and (other aquatic journalist) used to get challenged frequently by someone who'd gone on a forum and say how do I keep, has anyone ever bred a red tailed black shark and we'd answer it and then you'd get fifty answers from other people going yeah, but, yeah, but, but, but, but, but, but, and it's like well this person has now got fifty answers, the plural of data isn't necessarily fact, the plural of anecdote isn't necessarily data.*
> (Peter/1/263)

Peter's narrative introduces a number of important insights. Firstly, that other forum members contributed to the debate, has in Peter's opinion, only complicated matters – which he feels unnecessary in light of both him and his staff member's answer. Peter's point of view seems to have a genuine focus on offering the original poster a useful response, but in doing so, he is positioning his knowledge as definitive and is exasperated at being challenged. Therefore, this

demonstrates online hobbyists are not necessarily accepting of the views of affiliated staff who are in a position of power. Furthermore, Peter also considers the opposing voice – in both quantity and content – to only confuse matters unnecessarily. Regardless of the nature of the answer Peter and his staff member gave, what is significant here is that there is a lack of consensus between administrators and other forum members. Additionally, through Peter assuming his own response was sufficient, also introduces a perspective that suggests he feels he was the ultimate arbitrator of the truth. Incidentally, Peter also hints at an awareness of the distortive effects of search engine rankings. Subsequently, Peter offered further insights into the reasons he might be challenged:

> *I used to be the main admin, erm, yeah you get people who want to show off and kind of attack you, me and (other staff member) used to get it a lot, for them having an argument with (says his own name) editor of (magazine) is a big deal, "hey, I told him he was wrong, ha ha" I was like, I was really busy that day and I've told you I didn't actually know the answer so make of it what you will.* (Peter/1/1278)

Peter, therefore, explains how he feels other hobbyists might use his editor-status as both an intrinsic and extrinsic motivating factor in terms of using the act of challenging his views for enjoyment and attracting attention to show off to others. Ultimately, Peter is describing the strategic acts of others as related to a desire to usurp or dethrone those in a position of influence. In relating this to theory, that the views of those in power have a space to be challenged would be welcomed within both Habermas and Foucault's ideas. What would not, however, would be the strategic disruptions created by those motivated by an urge to promote their own knowledge or self, who also fail to produce genuine communicative actions or new iterations of enlightened knowledge through rational debate.

Jennifer, Sean and Peter's accounts, therefore, demonstrate the production of knowledges that oppose the collective voice. Whilst itself not substantially reflective of a specific origin, in attempting to understand communicative distortions through the linkages of all participant accounts, Peter, William and Sean's earlier narratives relating to the ease through which online worlds permit false assertions of *being knowledgeable*, might offer some tentative clues. Consequently, the extent that information that may or may not hold a representation of the

distributor's lived experience, and the ease that it might be circulated, might influence the formation of certain types of knowledge, values and beliefs that reflect a majority consensus.

In addition to the strategic actions associated with the ways in which fellow hobbyists present their experience and knowledge through a shared language, participants also talked of the influence of symbolic representations of meaning encountered through social media websites. Here, Peter is declaring his dislike for the format of the forum. When asked to talk about this further, he continues with his preferred format types:

> *Facebook, Twitter, erm because then its more kind of polite again, one to one, I didn't like the hierarchical forums where you know you literally go on to a forum and be called 'small fry' because you've got less than five posts and then you're on (a specific forum) you are a sprout if you are a new person.* (Peter/1/832)

The effect that Peter is explaining here is reminiscent of the *badges* of Facebook outlined in Chapter 3, however, at the time of interviews, the Facebook badges had yet to be rolled out. Here, Peter explains how technological affordance of digital communities of practice means that forms of *legitimate peripheral participation* can become governed by algorithmic forces and not generated through the collective, interpretative force of the human. He goes on to say:

> *So I'd go on to a forum, and you'd be categorised, I never got on with it because I've just gone on to read some information, I don't want to be classed as someone at the bottom and then talked down to by someone who has got ten thousand posts who is a super-premium grand high lord of the forum, who then has more kind of privilege over you, it is just bizarre. (Peter/1/840)*

The above narrative supports Peter's reasons for rejecting forums as extrinsically motivated by the avoidance of feelings of inferiority, driven by symbolic and personal representations that attempt to attribute knowledge status. Ultimately, these symbols are quantified representations, calculated through digitised means and 'anchored in tropes of self-improvement and self-mastery, in which people are able to hone themselves by knowing their body in greater detail' (Beer, 2017). Consequently, Peter's response to this form of self-

development is to understand the presence of a *false* gaze and in turn, purposefully evade judgement formed within perceived unauthentic conditions.

Craig also spoke about communicative distortions that emerged through the use of emoji symbols. The following narrative corresponds to his chosen learning object, which was something that he created. Craig had posted his finished object – a homemade light reflector unit for an aquarium – on the dedicated Facebook page of the aquatic society. Craig had already revealed that he was motivated to make this object in response to equivalent commercial units being overly expensive and poor quality. In response to me then asking if I could see how the unit was received, he located the post and we looked at the comments together. I noticed one peer response included a winking face emoji, so I asked Craig what his thoughts were on the meaning of that. He replied:

> *It's difficult with social media, they may be giving an honest, well I've done this before and it worked for me, some other comments might be trolling, that sort of thing, where I can do better than that.* (Craig/2/202)

Although only one instance of the use of the emoji keyboard from participants, these symbolic communication forms still require interpretation and consequently any ambiguity is liable to cause disruption. Furthermore, they are arguably interpreted in different ways to words, however the framing of their meaning still remains bound within the use of descriptive language itself – in the same way as written text. As their name suggests, they are also intended to introduce an indication of the communicator's emotional state, however, as Craig explains above, their intention is not always clear, nor useful in minimising anxieties relating to the perceptions and attributions formed by hobby peers.

5.4.5. The *imperative to speak*

Peter explains how some aspects of his own hobby activities are enacted in private. Here, he explains how he prefers to enjoy his hobby without feeling the need to speak about it with others:

> *Well, interestingly, I'm still a very private hobbyist believe it or not, I like keeping fish on my own, if my partner and kids go out, I will read a book and I'll sit there and I'll*

clean my tank and I don't like communicating about my fish, it is my hobby.
(Peter/350/1)

Peter goes on to say that in addition to his reluctance to communicate aspects of his hobby to others, he has some understanding of the effects of other hobbyists' perceptions and attributions:

People would assume that I would have the world's best fish tank and it's not like that, I'm practising things and doing things and playing, that's my toys.
(Peter/364/1)

Peter goes on to further explain the justification for his personal beliefs in terms of providing his fish with optimal conditions in which to successfully breed and rear their young. He is also aware of the disjoint between the expectations produced through his public persona and the less aesthetically pleasing state of his home aquarium:

If I'm breeding cichlids or something, I want all my surfaces to be dirty and covered in algae because my fry can pick at it but of course a family member will come and think fucking hell, he's written books, look at the shit state his tank's in, but that's when your eco-system happens, that's when the little bugs and algae grow.
(Peter/374/1)

Along with earlier stressing his reluctance to openly talk about his hobby, when he finds himself under the gaze of others, Peter feels he needs to address this conflict by dismissing the deliberate conditions of his aquarium in an offhand way, as if they happened without intention:

So, I always apologise, 'don't take any notice you know'. (Peter/1/370)

In reference to his tank, that Peter feels a need to defend *aesthetics* through distortions of his own values, suggests a response to normalised values. The above excerpt shows that projecting a self-deprecating manner seems to have taken precedence over a rational explanation of the precise reasons for the aquarium's conditions. Furthermore, Peter

seemingly manages his public/private divide in terms of repositioning his actual intentions to exist as trivial, in contrast to the alternative option of remaining silent. Consequently, the tactic of offering an utterance when there is a choice to *not*, could represent the Foucauldian notion of the imperative to speak, whereby instead of using one's own will to remain silent, in certain situations, there is an explanatory pressure to say *something,* regardless of its *truth*. Moreover, this particular idea is directly related to the perception that others hold an expectation that those around them will speak. Therefore, in satisfying this expectation through a speech act, regardless of its truth, also suggests a form of *agreement* in terms of attempting to conform to what another person might want. What is interesting however, is that this expectation of speech cannot necessarily protect against an utterance of truth. Therefore, this suggests that despite an apparent lack of purposeful intention to introduce strategy into hobbyists' learning worlds, they might exist as a result of the urge to communicate *something*.

The perceived need to speak an untruth also aligns with the Foucauldian function of the gaze and its ability to create influencing forces that have the ability to be mediated by a specific setting. This can be understood through appreciating that within the confines of his home, Peter dismissed his tank conditions as trivial to non-hobby individuals. In the interview session, however, he felt no such need for a distortion of the truth, demonstrated through his description of the *mechanism* behind the actual truth, as spoken to me through our recorded conversation. The reasons for this, however, are possibly multiple and complex. For example, Peter may feel the urge of the *confessional* in the presence of another hobbyist, as he was aware of my status from our initial contact, and therefore enacted under the assumption that I would understand his motives. Therefore, his perception of my interests and perceived skills may have influenced the degree to which I was able to become exposed to the *truth*, along with explanations of his behaviour in other settings. Or, the fact that I was a hobbyist at all might have been all that was required for a confessional. Ultimately, the gaze appears to be a relevant element of hobbyists' worlds, however, its degree of presence is subject to factors dependent upon additional contextual components that appear to mediate speech in response to the perception of the extent of a judgement. Consequently, there is a suggestion that the effect of the normalising gaze means that in some learning environments, an ethical or truthful context becomes compromised, despite the *absence* of overtly purposeful manipulation and

strategic gain. Regardless of the reasons for Peter's manipulation of his truth, this instance arguably demonstrates an individual dealing with complex machinations of intrinsic and extrinsic influential forces. Therefore, the vastness of the informal learning context, whilst vulnerable to seemingly obvious and palpable distortions, is similarly prone to hobbyists' more capricious actions that are difficult to fully understand.

5.5. Chapter summary

The findings discussed here demonstrate the diverse and at times, opposing representations of hobbyists' learning experiences. These distortions were in part, were able to be explained alongside both the theoretical framework and within the context of the literature. Additional points of discussion, however, were also produced, which served to foreground how tensions might be produced as a result of more nuanced arrangements of communicative acts found within voluntary learning spaces. That individual and collective frictions might be avoided or overcome can also be supported through the findings, offering useful starting points for any related work. Thus, the following chapter will aim to synthesise these key messages and offer some considerations on what these findings might mean for all those held to learn within the social world, along with reflections on the direction of future informal learning research.

Chapter 6 – Project summary

6.1. Chapter overview

The aim of this chapter is to recap on the purpose of this research and to synthesise the findings further to offer a comprehensive account of how the research questions, along with the overall project aim have been achieved. Also covered here will be an outline of the overall contribution to knowledge, including considerations on the implications of these findings for theory, practice and policy and how this study might link to future informal learning research. This chapter will conclude with reflections on project limitations and some thoughts on personal and methodological lessons learnt.

6.2. Recapitulation of the project's purpose

A stated in Chapter 1, the purpose of this research was to explore and examine the seemingly emancipatory learning spaces used by voluntary interest groups such as hobbyists in order to address the overall research aim of:

> What is the extent and effect of influential power relations within the communicative processes of hobbyists as agents of informal learning?

As stated and discussed throughout the thesis, the rationale for this aim was formed through recognising a tension between the characteristics of informal learning holding a degree of appeal within traditional education arenas with the lack of assurances that informal learning itself is able to unfold alongside modes and within spaces that hold a correspondingly emancipatory agenda. Furthermore, the research aim was also a result of the call from the literature asserting that the subtle nature of learning within the social world is generally poorly understood, not least in terms of the complexities associated with contextual perceptions of the online and offline space. Consequently, the following section will outline how a response to the research questions might be formed.

6.3. Answering the research questions: Summary of the main findings

In response to the main research aim, these findings support that communicative distortions within the voluntary driven informal interest groups of hobbyists are plentiful, wide-ranging

and at times subtle and nuanced making them challenging to detect. Furthermore, communicative distortions also produced direct and indirect barriers to learning, which further produced serendipitous learning instances and the formation of responsive strategies promoting the continuation of the learning journey and the hobby itself. Thus, the following sections will synthesise and summarise the main findings, organised as responses that reflect the chosen learning objects and also the theoretical and investigative elements bound within each of the three research questions.

6.3.1. Research question 1: How do aquatic hobbyists represent and understand the connection between the contexts of their *online* and *offline* learning spaces?

The extent of a divide between the online and offline space was revealed in various ways by participants. Online hobby spaces were generally embraced as a useful learning space compared with the time before the availability of the internet. Thus, online spaces produced instances of unsolicited, yet meaningful peer learning, however, this unfolded alongside varying degrees of disruptive influences that related to the extent of the awareness that information from either space might reconcile to pervade the space of the other. Subsequently, this awareness reflected a predisposition toward attributing the online space as more likely to hold disruptions, with the offline space considered the benchmark. Furthermore, aspects of the online space produced novel communicative effects that could not occur either within the offline space, or within other types of communicative mode.

All participants' learning objects demonstrated some link to learning within the online space, with these objects linking to the production of observational learning, peer learning – including peer support and problem solving, practical and observational learning, technical learning and a general preference of preferring to learn online or through printed books. Subsequently, learning was associated with these objects through peer-triangulation of offline/offline effects, an appreciation of the affordances of the online space, the avoidance of perceived distortions, averting peers from their own frustrating knowledge quests, demonstrating how custom-made objects help save money and engaging in deeper learning through scientific application. Consequently, in aligning with Willis' (2007) emphasis on using symbolic forms, accessing participants' views through objects revealed additional clues to hobby learning perhaps not available in their absence.

6.3.2. Research question 2: What is the nature and extent of communicative distortions within hobbyist learning spaces?

As the previous Chapter demonstrated, communicative distortions became evident through multiple modes and ways within hobbyists' learning spaces, all of which held various forms of influence in terms of producing distortions to communication. Additionally, the criteria for creating the ideal conditions for speech were not always easy to produce or locate within both the online and offline hobby spaces. Additionally, having an awareness of a space for debate was not a sufficiently enticing motivator to ensure a hobbyist would enter it. As a result, determining the intention behind a perceived distortive communicative act in any space was not always straightforward, however, intentional or not, the effects of perceived strategies still held consequence. Thus, participants perceived the offline corporate and retail spaces as wholly complicit in introducing distortions and reproducing normalised beliefs, resulting in unethical, commercially driven solutions that also acted to deny the formation of fair and equal conditions for all. Likewise, despite being unintentional, the busy nature of the society meeting night also inadvertently produced some distortions to communication but was also seen as a space that afforded positive communication. Some responsive strategy was required, however, as demonstrated through the formation of *safe* peer splinter groups to help those less confident avoid the perceived negative or judgemental gaze of others. The online space, however, also introduced various influences that negatively impacted forming ideal conditions for speech. These were, *presentation* and *communicated mode of information*, *social media platforms*, *language choices*, *loyalty* and *identity* and *avoidance behaviours*.

Within the online space, instead of offering advice through direct comments, the formation of a *gatekeeper endorsed* resource became a way for a newcomer to offer advice. Moreover, this mode also enabled legitimate peripheral participation to occur and might also be considered the result of the negotiation of a threshold concept. That participants who might otherwise be excluded from the arena for debate through feelings of their own self-esteem or efficacy, found motivation to remain in the hobby, whilst also determining how they might be heard, demonstrates a hopeful ingenuity that aligns with the values and purpose of critical theory.

Participants explained various ways in which the smooth running of their lifeworlds became interrupted through thematization and also its failure to attract new meanings through the inability to sufficiently triangulate information from multiple sources. Some instances of hobby learning also rendered the lifeworld redundant, which affected the ability of hobbyists to thematise and subsequently find meaning. Participants also described instances that suggested they understood their state of perplexity, however achieving a satisfactory negotiation into meaning was not always possible. It was also implied, however, that some triangulation attempts naturally produced encounters with a majority consensus either through confirmation of ones' own intuition or finding multiple instances of agreement. Consequently, majority opinions were seen as appealing and therefore acted to end a particular knowledge quest through their acceptance. The hobby majority was also perceived as able to produce mass agreement that shared no alignment with individual hobby experiences. This suggests that there are incongruities within shared lifeworlds that somehow fail to hold any majority resonance, to continue to represent a minority. Thus, participants explained reasons for how a particular normalising gaze rendered them without a voice. Participants also described instances where triangulation and opportunities to thematize were both embraced and actively refused.

Participants also offered insights into how the unavoidable discourses of retail and corporate aquatic settings served to distort learning through insufficient overlaps in shared lifeworlds. Furthermore, the *parasitic,* colonising *mediatization* effects of retail and corporate discourses, as Habermas would suggest, appeared to be inextricably entwined within the world of the hobbyist and at times, participants found their distortions both difficult to detect and avoid. Retail spaces were explained as cost-prohibitive along with holding and distributing inaccurate and contradictory information that only became apparent when the accumulative effects of hobbyists' knowledge quests rendered retail information as confusing or unable to be explained or reconciled within the experiences offered by their own lifeworld. Furthermore, participants talked of the conflict introduced through positioning animals as commodities in terms of balancing the care of animals with the commercial interest to sell them in quantity to earn a profit. Ultimately, this conflict was perceived to affect the quality of ethical advice, which had significant implications on both the theoretical and practical learning pursuits of all participants. Elements of the disruption produced through retail spaces, however, contributed

in a positive way through encountering serendipitous learning experiences and negotiation of a threshold concept and the subsequent production of a simplified resource that might help reduce potential disengagement of learning for others. That newcomer hobbyists were able to endure commercial distortions to then eventually learn how to recognise them, is an encouraging sign of a progressive and empowering critical engagement with hobby learning pursuits.

6.3.3. Research question 3: What are the *characteristic ways* that aquatic hobbyists understand communicative distortions within their learning spaces?

In order to address this question, the ideas that sit within Foucault's *governmentality* are required. Thus, participant responses that relate to the idea of the care of the self were explained in terms of *confrontation*, *anxiety*, *intimidation*, *frustration, passivity*, *diplomacy* and *being overly* trusting, along with various instances of *avoidance-type* behaviours. Participants tended to describe perceived strategic actions of others as being purposeful, however, as mentioned above, overall analysis suggests that the *intention* of the perceived strategic actions was not always apparent. Furthermore, even if a hobbyist willingly chooses to falsify information, reasons for duping others arguably lie within another type of justification that may or may not exist at a fully cognisant level, nor may ever be made overtly clear. This type of scenario undoubtedly poses challenges for the educational researcher.

The normalising gaze, therefore, became manifest in various ways, in varying permutations of effect. Considerations of the length of time spent in the hobby formed a gaze that produced perceptions of knowledge status, with newcomers positioned as holding limited knowledge. There were also times when the nature of the gaze was unequivocally attached to the space in which it was produced and the format in which it was communicated. Additionally, participants described locating instances of online strategic actions in relation to the influential effects on both their own and their peers' intrinsic and extrinsic motivational factors. Likewise, a type of *self-critical gaze* manifested in less obvious ways than those associated with observing social norms.

Despite a tendency for participants to explain their understanding of the communicative distortions found in online and retail spaces at length, they did not explicitly refer to the ability

for information within the physical world to pervade into online spaces and vice versa. The implications for this absence, therefore, are particularly pertinent to the physical space of society meeting nights, where there was a general assumption that the characteristic nature of the setting was more conducive to the production of authentic knowledge and values, however, *how* that perceived authentic knowledge might be reliably assembled, however, was not explained.

In some ways, the gaze was understood as a positive force, such as those already described in terms of the welcomed gaze of the gatekeeper, positive peer interactions and the negative perception of the retail gaze. In addition, a technocratic gaze within online spaces operated in ways different to the offline space, ultimately producing labels and judgments that would seem bizarre if enacted within the society meeting night. Furthermore, in those confident, experienced hobbyists, their understandings that contributed to shaping their own aquatic hobby, seemed to also produce its own response to the normalising gaze identified through perceptions of lazy or unauthentic knowledge, unless verified from another trusted source.

Perceptions of those social norms that influenced the hobbyist to feel confident in speaking up were also explained, however, what was less clear was the instance of producing an unauthentic truth when faced with offering either a truth or remaining silent. Furthermore, the normalising gaze to find consensus was insufficient in persuading an opposing peer that there might be alternative explanations for their views and therefore could not remove conflict produced through value-contests. The gaze also seemed to influence the types of questions that might be seen as appropriate to be asked, which foregrounded differences in the ways in which certain responses might unfold in the online and offline space. The use of search engines seemed to hold its own judgments, with the general acceptance that these were an acceptable mode of enquiry as long as certain rules were observed as to what happened to the resultant information. Search engine use also produced derogatory labels that appeared to be at odds with their very characteristics and function.

6.4. Overall contribution to knowledge

This project contributes to the existing informal learning knowledge base in three important ways. The first area relates to the nature of all that it is to learn informally within a community

of practice, with an emphasis placed upon culturally diverse individuals and their differences and the appeal of both physical and digital spaces for collective learning. This emphasis is important as it foregrounds the unavoidable and enduring aspects of these human and social influences and in doing so positions them as fundamentally inherent to the problem itself. Thus, as outlined in Chapter 3, concepts that embody particular communicative states and modes within communities of practice - such as the echo chamber, cyber ghost towns, distributed knowledge and perceptions and attributions of the self – are also commonly positioned as problematic within the literature and are correspondingly well-established and widely acknowledged. What is less clear, however, are the underlying mechanisms behind them that serve to introduce communicative distortions. Consequently, the findings of this project go some way toward demonstrating the various nuanced and subtle ways in which the divisions and tensions associated with learning contexts, the online and offline space, the effects of the digital age and manipulations to language and the self might be located and explained. Therefore, given that communities of practice – and its theory - now exist beyond its initial anthropological roots to hold a broad and abundant application across many social organisations, these additional illuminations of the individual, social and digital processes behind enduring problems of collective learning, confidently enhances aspects of communities of practice theory and informal learning as a whole in a novel way.

Secondly, in placing an emphasis upon the affordances of the internet and the online space, the findings of this study allowed the subtle degrees of complexity associated with the role of the world wide web to be foregrounded. Moreover, the perfunctory influences of the internet also reflect one of the central issues of enlightenment in that the seemingly facilitatory aspects of a progressive modern landscape can also introduce additional complications. Moreover, with reference to the routine nature of the internet in everyday life, the findings of this project further illuminated aspects of duality that relate directly to its ubiquitous presence. Thus, regardless of the online or offline space, the effect of the internet's routine and taken for granted presence in informal learning communities of practice is one that acts to sanction the origin of its problematic effects to exist as muted and difficult to locate yet holding real and substantial impact. Thus, in moving away from positioning these issues as intractable, the findings of this project - through highlighting the tensions of digital influences being both an inhibitory and conducive influence upon the *individual*, *community* and *practice* – are able to

demonstrate an approach that reveals the agency and context through which problematic issues might arise. Consequently, considering that the effects of the internet are arguably here to stay, the effects of these tensions may not be an easy gulf to bridge, however, in using the findings explained here as a starting point, a space becomes available in which troublesome issues associated with informal learning might be traced with sufficient transparency that workable solutions to various conflicts might be found.

Thirdly, findings from this project also makes space for the theory concerned with threshold concepts to be developed upon, with respect to the theory of the concepts themselves usually being applied to complex theoretical ideas. Thus, the findings of this study demonstrated that in overcoming a theoretical closure of the liminal space, it is both a practical application *and* a need for undistorted communication that instigates a need for this negotiation in the first instance. Furthermore, this closure also allowed for the complexity of the negotiated theoretical information to then become reimagined and redistributed to exist in a more accessible format which ultimately might act to stem instances of 'detrimental' perplexity in other hobbyists. Consequently, in applying the theory of threshold concepts to informal learning communities a novel understanding of the individual, practical and social mechanisms behind their presence is foregrounded.

6.5. Implications for theory, research and practice

As introduced in the section above, the findings of this project should hold particular interest for those educators concerned with communities of practice theory but also those practitioners and career professionals who hold a close working relationship with citizen scientists. In terms of communities of practice theory, it was evident here that fundamental components of the theory - such as legitimate peripheral participation and the perceptions and attributions that are associated with constructs such as *identity* and *expertise* – can attract alternative interpretations when positioned against how the hobbyists in this study responded through their own *practice*. For example, rather than feeling alienated by peers perceived to hold expert knowledge, new hobbyists used their own novice identity to form a safe space with their equivalent peers. Consequently, instead of communities of practice theory assuming that newcomers must always take 'knowledge counsel' from their 'expert' peers, the findings here demonstrated this not to be the case. Furthermore, this division in assumed identities also

encouraged resources to be produced that held the sole aim of transforming complex information to exist in a more accessible form. As introduced in section 6.4, the creation of these resources could be seen to directly connect with the successful negotiation of a threshold concept, therefore the ways in which this particular learning theory might map on to more practical matters of informal learning are also of importance and warrant further exploration.

6.5.1 Implications of the findings for policy

As outlined in Chapter 1, the issue of the application of *policy* within informal learning contexts is not necessarily as straightforward as it is within traditional educational arenas. Moreover, informal learning itself holds no such equivalent demands for policy attention as it fundamentally requires no such policy at all. That said, both the *knowledge* and *practice* produced through informal domains *is* of specific interest to traditional educators, as evidenced through the citizen science and student engagement literature. Therefore, all those implicated within formal educational spheres that seek to form relationships with informal learners in exchange for an enlightened benefit have a corresponding responsibility to not only understand the landscape in which the knowledge they so desire is produced but also to appreciate the ways in which the individual, social and digital influences outlined here hold implications for their own projects and policy.

6.6. Methodological lessons learned and reflections on the ethnographic researcher role

The ethnographic methodological framework used here - along with the associated methods - was one that enabled an in-depth exploration of the hobbyists' informal learning landscape to take place. Furthermore, I was able to collect rich data, which in conjunction with my analysis approach produced a multitude of subtle and nuanced findings with useful implications as outlined above. That said, at times, the chosen methodology unavoidably caused some temporary disruption to the research process. For example, in using the monthly meeting nights as a defined field, it was not until I immersed myself in it could I understand the extent of how my own conversational interaction – at any meaningful level – with participants would require revision. Similarly, the ethnographic approach felt at times to produce its own forms of gaze and whilst these effects had no serious implications for the project as a whole, there were times when the interactions that inevitably ensued with participants ensured that other

avenues of data collection might not be available. This was demonstrated through my decision to not directly use Facebook posts from the dedicated aquatic society's group, even though the group is public and therefore open to anyone regardless of having a Facebook account or not. This decision was taken in order to avoid the problems associated with ensuring absolute anonymity and also fostering trust. Likewise, a scenario of using Facebook posts as data and thus making this overtly clear from the start might also have had a mediating or modifying effect upon *what* participants might be willing to post. Consequently, by avoiding this situation, there are at least some assurances that the nature of the observed content that appeared in the group in the days after the meetings – and elucidated upon in Chapter 4 – was generated with as much distance from my 'researcher influences' as was arguably possible.

6.7. Limitations of the research

In researching alongside aquatic hobbyists, it feels reasonable to assert that their enthusiasm and dedication to their subject aligns with other hobbying groups seen in the hobby literature, for example, ornithologists, musicians, astronomers, cartographers and beekeepers. Likewise, the research design and aims of this project were purposefully fashioned to capture the essence of the particular spaces and modes of communication that might be applicable to all types of hobbyist, not just those learning in the field of aquatics. This feels particularly pertinent when considering the nature of online learning spaces and the somewhat systematic and formulaic ways in which the tools of the internet and social media platforms present. That said, care should be taken in over interpretation of the findings when considering that this study also placed an emphasis upon the physical space of the aquatic hobby, which, if mirrored by other hobbyist communities would arguably enact in ways different to those described here as a result of the mediation of the subject matter itself. Thus, the nature and structure of the 'informal curriculum' that unfolded at aquatic meeting nights might also have produced its own unique activity that means the findings cannot always be extrapolated in the direction of other hobby worlds. For example, the issues related to the *gaze* and the *imperative to speak* that related to the moral and ethical framework of fish husbandry, might never arise in the same way for guitar players or astronomers.

6.7.1. Limitations of the theoretical approaches

It became clear early on that the variance in the vast representations of the Habermas/Foucault debate had the potential to feel daunting and intimidating. Understanding Habermas' journey from young post-war scholar to his theory of communicative action arguably demands vast reading of correspondingly broad fields of philosophy, sociology, psychology and linguistics. Similarly, Foucault's works, at times, place serious demands on the reader, with neither theorist arguably adequately represented here under the influence of a need for brevity. Thus, in order to maintain my own theoretical grounding within a study that essentially travelled alongside both academic theory and individuals who voluntarily choose to enhance their life through interests, I endeavoured to hold the common purpose of critical theory – emancipation – close at hand.

Whilst, both Habermas and Foucault's ideas enabled some useful comment to emerge from the learning worlds of hobbyists, there are both encouraging signs and limitations to either approach. This project demonstrated that Habermas' theory might help tackle emancipatory issues within informal learning and thus, to some extent the application of his theoretical principles produced workable approaches to identifying instances of communicative distortion. Likewise, that solutions to these struggles are always able to be located cannot be asserted, considering this project demonstrated that neither consensus nor a space for fair debate might neither ever be found or desired. These emancipatory principles, however, whilst purposefully normative, introduce Foucauldian critique, not least with respect to a world that produces meaning against a backdrop of shared cultural norms, rendering any consensus as inherently bound within a framework of seemingly infinite iterations of judgment, fear, avoidance and dominance.

Accusations levelled at Habermas' foundationalist account are plentiful, however, these attacks themselves only serve to foreground further philosophical debate around what is accepted as *the* foundation (Roderick, 1986, p.8). Further criticism abounds however, not least in terms of the challenges of conceding to the 'better argument' when considering that forming a consensus cannot guarantee the absence of inherent influences, nor eliminate contextual distortions that permit misapplications of judgement. Furthermore, as this project

demonstrated, trivial situations cannot always consistently reveal instances of persuasion, acquiescence or even the argument itself (Flyvbjerg, 1998).

Foucault entered the critical arena with no such intentions of offering the researcher a neat theoretical analytical framework. Furthermore, adopting Foucault's approaches when he left little in the way of explicit direction, means that at times, the researcher encroaches into their own judgmental stance, particularly when attempting to locate instances related to his idea of the care of the self and the gaze, which by their very nature, suggest a level of internalisation that might be troublesome for a researcher to confidently affirm without introducing their own colonising communicative effects. Furthermore, for an individual to realise the extent to which they *could* be free and understanding the extent they *feel* free, are arguably two very different states of being, however this concern is not new to philosophical or socio-educational domains, as evidenced through wide-ranging social justice literature. Subsequently, the idea of care of the self is arguably a less than straightforward analytical approach, however, in grounding the previous chapter's findings in close alignment with the narrative of participants, I aimed to at least minimise my own over interpretation of the data. In many ways, Foucault's analytical method enthusiastically assumes the role of prosecutor, complete with an unapologetic desire to accept the burden of proof – not to necessarily to satisfy punitive means, but to demonstrate that the defence needs to offer a more proactive response beyond notions of reasonable doubt.

Habermas understood that the process of enlightenment - whilst addressing necessary emancipatory concerns related to the brutal and uncivilised *state of nature* – also produced a seemingly unavoidable engagement with the social contract producing its own new distortions for modernity, including learning. Therefore, adopting Habermas' idea that the utopian process of enlightenment, whilst arguably producing *newer* problems, might also still present conditions for an ethical engagement with informal learning. Additionally, as Flyvbjerg (1998) suggests, just because arguments or divides *seem* unresolvable, does not necessarily mean they are not worthy of reconciliatory attempts. Thus, in terms of social learning, maintaining a utopian mindset is not necessarily a naïve position for the hobbyist to act within, providing a vigilance of both the potential strategy of others and *some* attempt at understanding the moral and ethical implications of serving ones' own interests is upheld.

Some of these difficulties outlined here relate to a moral/ethic divide, with Habermas' theory holding a procedural and ethical element that in some ways serves to distract the individual from drawing upon their own moral thoughts and desires. For example, if the negative aspects of Foucault's *gaze* were somehow to become desired by the common will, that is, ascertained through the procedure of free debate by all parties, the formation of a panopticized society would arguably prompt little response from the theories of Habermas (King, 2009). Habermas, however, was well aware of the dangers of a majority consensus, therefore, this form of criticism seems a little misplaced. Rather, Habermas would hope the resurgence of the human critical interest would eventually endeavour to overthrow social injustices, as witnessed on a global scale at least twice in the 20th Century. That said, expressed in these terms, this and arguably any utopian vision might be easily mocked. Foucault, on the other hand resists instructing the human *how* to live their life, to instead urge how to better understand their own moral way of *being*. In some ways, this demonstrates Foucault's own shift toward a foundational basis of *morality,* especially as he neared the end of his life. Ultimately, the act of reconciling their two perspectives to consistently exist as harmonious in the contemporary informal learning landscape seems almost a futile endeavour, nonetheless, this project highlighted how each view holds analytical merit in identifying instances of consensus and conflict.

6.8. Implications for future research

The aim of this study was to produce an account of the ways in which communicative distortions become manifest within the informal learning spaces of hobbyists. Thus, this project highlighted that understanding the presence and intention of strategic actions is arguably challenging for reasons associated with both determining and clarifying duplicitous intentions, whilst also resisting the urge to be judgemental of hobbyists' behaviours. Thus, the complexities of *context* and understanding value (Edwards, 2009) within the characteristics of various informal learning environments remains and seems to share some relationship with the unpredictable effects of individual differences. In addition, in response to the enquiry relating to the perceived link between the offline and online learning space, whilst appreciating the consistency of the human, the findings demonstrated how online spaces facilitated both purposeful and inadvertent distortions that would not easily, if at all, unfold in the same way

offline, further emphasising some of the idiosyncrasies attributable to the digital age (Beer 2019). It is understanding the presence and effects of these online-generated quirks that might help to address unauthentic or unrealistic behaviours in the offline space, even if this merely highlights other manifestations of imbalance or inconsistency.

Despite commercial spaces being wholly acknowledged as failing to share corresponding hobbyist beliefs and values, the many ways that participants understood communicative distortions in their social spaces demonstrated a preference toward explaining and framing these in online terms. Thus, the encouragement offered by Suler (2000), Slater (2002) and Williams (2006) to accept the online space as a natural extension of the social world and self, endures as troublesome; similarly, it might be pardoned or even accused of naivety, considering this research reflects the era of emergent internet use. Subsequently, it feels sensible to uphold Lin, Su & Potenza's (2018) assertion that this divide – some 20 or so years later - remains poorly understood. This is particularly pertinent considering how the framing of this project – that is, to account for *space*, *modes* and *acts* of communication - highlighted how each space produced distinct effects not easily reproduceable in the opposing space that also served to unfairly distort perceptions and attributions of peers. Thus, in positioning the tendency to attribute the online space as more distortive, whilst considering the absence of any direct awareness of the ways information can arbitrarily shift between both spaces, there is a suggestion that the online space, along with its *quirks* has also produced its own norms that have become embedded into everyday hobbyists' ideas and practices, *regardless* of the communicative space. Thus, the demarcation between the online and offline *space*, *self* and the *information and modes* found in either space, becomes a somewhat existential concern and might therefore require re-assembly - *not* removal - in order to realise the presence of distortions.

In addition, hobbyists' learning strategies may also offer some suggestions for the direction of future informal learning research. For example, further exploration of the presence and extent of the negotiation of threshold concepts (Meyer & Land, 2003; 2005) within hobby learning strategies would help to highlight additional practical based areas that produce deeper learning processes. Additionally, the ways in which hobbyists attempt to close the liminal space could offer further insight into the formation of firm beliefs to offer clues as to how

disruptive or unenlightened allegiances with dubious information might be upheld, reproduced or challenged. Consequently, this might be a tentative starting point in helping to address issues such as how to remove conflict in the presence of forms of weak consensus. The divide between aquatic hobbyists and their associated retail and corporate worlds also deserves attention, considering both their inescapable relationship and the subsequent infiltration of commercial information into the hobbyists' learning domains. Exploration focusing on the extent of the effects of the hobbyist *gaze* might also be considered worthwhile, considering some hobbyists declared the gaze of the gatekeeper to be a worthy allegiance. Subsequently, further research might explore how to manage the need for a *level of gaze* within some aspects of the hobby, without also introducing inadvertent levels of authoritarian control that over time hold and reproduce their own undesirable, yet normalised disruptive forces.

All participants explained how they became vulnerable to various communicative distortions, however, the more experienced hobbyists also appeared to be reasonably proficient in managing them through combinations of vigilance and embracing confrontation, along with adopting surreptitious behaviours – all with an ethical purpose. Hobby newcomers, however, appeared to experience their own type of communicative distortions, producing effects related to avoidance and the formation of newcomer factions that subsequently produced their own discourses away from the community as a whole. Therefore, these splinter groups might potentially be vulnerable to other communicative distortions relating to the echo chamber (Edwards, 2013), reduced instances of thematization and the formation of knowledges, loyalties and beliefs that are based upon lifeworlds that undergo minimal accrual of new, potentially enlightening information.

This study also demonstrated the nature and extent of communicative distortions within informal learning spaces and whilst some aspects of communication remain problematic, hobbyists' own strategic insights might offer suggestions for helping to minimise troublesome communicative barriers to effective informal learning. This means that those hobbyist informal learners who might feel disengaged, alienated or intimidated by all that it means to attempt to self-direct ones' own learning, can endeavour to overcome such barriers in a participatory sense, with the support of their peers. Importantly, this project revealed that peer support for newcomers or novices does not necessarily have to come from those considered to be *expert,*

master, or an *old timer*, with self-declared newcomers – who held no pretentions of assuming an *expert status* – demonstrating a desire to use their own learning journey to support others. This assertion, however, also suggests that understandings of LPP might be revised to moderate the emphasis that newcomers are exclusively guided by those who are considered expert or in some way more experienced or capable. Likewise, this project highlighted that those hobbyists who become proficient at their craft over years of engagement also have a role to play in both supporting newcomers and also challenging dominant systems and discourses, that left undisturbed, only serve to reproduce ineffectual practices and outdated ideas. Therefore, regardless of the extent that hobbyists themselves perceive the attributions afforded to them through the language of educators concerned with CoP, that these labels exist implies they have an effect within all settings in which they are implicated, namely in the educational literature. Thus, questions arise as to their relevance, considering some hobbyists show an inclination to both support and be supported by those not necessarily considered *expert*. Therefore, research efforts in this area might offer further insights into the effects of peer support within hobby learning. Some thought also needs to be given to the ways in which research efforts focused on emancipating the hobbyist are both driven by hobbyist discourse and more importantly, are able to be subsequently disseminated into their various communities and consciousness - with the aim of upholding sincere and authentic instances of social learning through successful and progressive lively communities of practice. On a more cautious and perhaps realistic note, that there is value held within some instances of conflict – through foregrounding a particular injustice – should not be ignored. Nor should the utopian expectation that value contests can always be, or desire to be resolved by all those implicated within a particular social learning struggle. Therefore, the suggestions outlined here are fully cognisant of these caveats.

6.9. Thesis summary

In revisiting the earlier assertion of the contribution of this thesis – which was to offer further insights into the ways in which informal learning might be influenced by communicative distortions – the findings here touch upon several novel aspects. Firstly, as already outlined, within the educational domain, hobby literature is unsurprisingly scarce. Therefore, any new empirical research that contributes to the informal learning landscape should be a positive addition. Secondly, the scarcity in hobby literature has a corresponding effect on the issues

that are known to impact upon *all* learning spaces, including those generally positioned to be emancipatory. In turn, empirical accounts of the presence and consequence of relationships of power and influence within hobbyist learning settings held a strong justification for its own enquiry, not least so that the robustness of those seemingly appealing emancipatory characteristics might be explored.

To move beyond reductions based around an insufficient literature base, this project stands as original in the sense that I have attempted to unravel and expose elements of the social learning landscape that have arguably remained ignored or taken for granted as a result of various effects driven by their contextual complexities. It is not necessarily the ideas discussed here, nor the comparative analysis of the two theoretical proponents that I am asserting to be unequivocally unique. Rather, the originality of this project relates to a re-imagining and re-framing of established informal learning contexts through gaining detailed access to participants' narrative and object-oriented hobby experiences, in order to scrutinise their first-hand accounts for contextual communicative relevance. Thus, assertions of a contribution to new knowledge are also based upon a better understanding of the influential factors within informal learning spaces - foregrounded further through additional effects generated by production of their chosen learning objects. Ultimately, in understanding that informal learning spaces hold a functional prominence in everyday life, this project gives new depth to recognisable thoughts, ideas and concepts, whilst also allowing some of the arguably untold and concealed elements of communicative complexities to be better realised.

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